Abbett IA, 528 Abdollah H, 1349 Abdullah M, 218 Abe T. 1402 Abildskov JA, 29C Abi-Mansour P, 982 Abrahamov A. 998 Abrams 1, 931 Abruzzo BP, 403 Adgey AAJ, 741 Admant P, 81 Aihara N. 37 Alain P. 1284 Alam M, 1387, 1389 Albert A. 315 Albrecht P. 536 Alderman EL, 16E Alderman JD, 725 Aldridge HE, 778 Alexanoulos D. 540 Al Fagih MR, 218 Ali-Ridha NH, 1049 Allen BJ, 1202 Alien JW. 1157 Almany SL, 1270 Almouist A. 599 Alpert MA, 1361 Aiston JR, 385 Ambrose JA, 256, 540 Amery A. 16D Ames RP 203 Amirparviz F, 683, 937 Ammerman A, 111 Amsterdam EA, 866 Amuhasi J. 1162 Anderson J. 741 Anderson JL, 1A, 12A Anderson RH, 833 Andoh M. 1082 Andrade JL, 540 Angel A, 237 Angelini P, 106 Annable L, 1249 Applegate PM, 243 Aptecar E. 513 Araujo L, 956 Arbustini E. 993 Arena JP, 351 Arends D. 61 Argenal AJ, 940 Arie S. 99 Arizon J, 491 Armour JA, 696 Armstrong G, 687 Armstrong MA, 237 Armstrong PW, 256 Armstrong WF, 1123 Aronow WS, 232 Arora R, 240 Artis AK, 1361 Ataliah G, 79J Atkins DL, 1052

Ba'albaki HA, 708 Baas J, 167 Bacharach SL, 921 Badsberg JH, 961 Bailey BP, 1216 Bairey CN, 282 Baker PB, 109 Ballenger M, 76

Avedissian MG, 106

Axtell K. 199

Ayres BF, 1204

Balli E, 1162 Ban T, 860 Bansal RC, 243 Barbash GI, 225, 1231 Rarbiere C, 1180 Barefoot JC, 427, 1280 Baron JA, 519 Barth G, 161 Bansand J-P, 18A Bateman TM, 1221 Batler A, 225 Battisti P. 604 Beatt K, 88 Becher H, 374 Becker DM, 1108 Bedotto JB, 856 Bedrossian CW, 1322 Beekman RH, 128, 820 Bell AJ, 319 Beller GA, 466, 871 Beller K-D. 7D Bellodi G, 885 Bellotti G, 229 Bellotti P, 588 Ben-Ari E. 300 Bender R. 547 Benditt DG, 27, 599 Bengur AR, 756, 820 Benjamin P, 395 Bennett ED, 1211 Beppu S, 1082 Berenson GS, 32C Berk MR, 905, 1069 Berman DS, 9B, 282, 1022 Berman GO, 209 Bernardi L, 787 Bernini F, 1291 Bernini G. 885 Bernstein L. 1216 Berton G. 1379 Bethencourt A, 620 Betocchi S. 745 Bevan DH, 1211 Bianciardi G, 504 Bianconi L. 335 Bielen E. 16D Bienvenu GS, 16H Bierman FZ, 252 Bigger JT Jr, 11, 536 Billingham M. 1063 Billingham ME, 1093 Binkley PF, 109 Biondi JW, 772 Birkenhager WH, 22D Bittar N, 31F Bjorling VG, 1043 Black W. 1053 Blackburn H, 454 Blancia Sig. 40C Store 5 547 Bishes Nº 90 Biurowthal JA, 427 Discadavas R, 335 Rodes WE 759 Sinderthe JN, 1333 Bouring B, 1185 Boer R. 431 Boesch C, 30A

Bogaards MA, 820

Bohm M, 812

Bogaty P, 1284

Boineau RE, 651

Boldt M, 311

Bonow RO, 921 Borel E, 18A Borislow DS, 549 Borow KM, 1173 Bossini P. 885 Bot H. 167 Boucher CA, 51F, 1243 Bove AA, 1072 Bove EL, 354 Boyle K, 1072 Brachmann J. 329 Bragdon E. 76 Brand A. 998 Brand DA, 1087 Brandao A, 540 Branski D, 998 Braunlin EA, 359 Braunwald E, 256 Bravo G. 581 Brembilla B, 66, 81 Brewer HB Jr, 3G Brinker J. 1108 Brodsky MA, 1202 Broeder CE, 343 Brooks-Robinson S, 294 Brown A, 937 Brown AS, 683 Brown KA, 1019 Brugada P, 534 Bruggemann T, 878 Brusca A, 487 Bryan CH, 111 Brzostek T, 1103 Buckingham TA, 1289 Buda AJ, 752 Buda AJ, 752 Budzilowicz L, 577 Buetikofer J, 27 Bufalino V, 937 Bufalino VJ, 683 Bunnell P. 840 Burges RA, 101 Burggraf GW, 1349 Burkhart MW, 1405 Burns D, 905 Burton DA, 685 Businaro R. 1379 Byers S. 161

Cabin HS, 1264 Cachera J-P, 513 Cahill J. 937 Cahill JM, 683 Califf RM, 651 Calisi CM, 680 Camerini F, 504 Camm AJ, 1J, 70J, 1310 Camm J, 424 Campanz C, 993 Campbell D, 1275 Campbell RWF, 50J Cannon A, 1216 Cannon RO III, 425 **Cantin B. 1284** Capone RJ, 799 Capparelli EV, 1202 Caref EB, 16 Carew TE. 18G Carlier M, 148 Carlino M, 1061 Carlson P, 1180 Carpenter B, 1180 Carrasco JL, 491 Carrothers SG, 1138 Carter GS, 845

Carvalho A, 540 Casale R, 403 Cashion RW, 172 Casolo G. 1162 Cassagnes J, 18A Castaigne AD, 30A Castellanet CD, 1376 Castellanos A, 1047, 1305 Castle CH. 35H Catapano AL, 129i Cater A, 905 Celentano DD, 1108 Cerino M. 276 Cerqueira MD, 1080 Chaitman BR, 1, 161 Chalant C, 581 Challinor K, 406 Chalon B, 81 Chamberlain DA, 34A Chamone DF, 229 Chan MC, 940 Chandraratna PAN, 793 Chandrasekaran K, 809 Chapelle J-P, 315 Charlap S, 577 Charnilass J. 225 Chartrand C. 213 Chatterjee K, 1343 Chaux A, 668, 1168 Cheitlin MD, 1396 Chen F-R, 940 Chen P-S, 680 Chen Y, 943 Cheng TO, 834 Chesler E, 665 Chiang C-W, 126 Chiarella F, 588 Chierchia S, 1061 Child JS, 945 Chin C, 1249 Chin S, 351 Chitwood WR, 406 Chobadi R, 811 Chopra PS, 1356 Chouhan L, 938 Christensen DM, 51F Chrysant SG, 203 Ciantione D. 1061 Cigarros RG, 155, 246, 257. 261 Clarke JG, 956 Clegg L, 1180 Cleman MW, 1264 Clement D, 674 Clements IP 646 Clifton CG, 16H Clifton GD, 905 Closz JL, 66 Cabb FR, 651 Cody RJ, 1338 Coello I, 620 Cohen A, 943 Cohen JL, 385 Cohen RJ, 536 Cohen TJ, 1078 Cohn JN, 1382 Colandrea M. 937

Colandrea MA, 683

Collins M, 1180 Condorelli M, 745

Conversano A. 1061

Conn RD, 1221

nio D. 403

Colomb

Cole DJ, 546

AUTHOR INDEX

Cook EF, 1087 Cook ME 16H Commilas J. 11 Corsini A. 1291 Cosyns JR, 614 Cournel P, 41J Covalesky VA, 809 Cowley M, 840 Cox M, 1305 Cox MM, 1047 Coy K, 835 Cragg DR. 1270 Crawford-Green C, 921 Crea F, 139, 264, 1098 Crijns HJGM, 1041, 1317 Crockett JE, 1221 Crow RS. 454 Crowley DC, 128 Crozier 1G, 102, 948 Cuccia M. 993 Cugini P. 604 Cunningham SR, 741 Cupples LA, 555 Curry CL, 1029 Curry PVL, 116 Curtis JJ. 1144 Curtius JM, 1195 Czer LSC, 668, 1168

43

Dafopoulos N, 6 Dagenais GR, 1284 Dahan M, 1010 Daikoku S, 37 Daily PO. 547 Dal Palu C, 1379 Dalzell GWN, 741 D'Amato PH, 546 Danese D, 604 Dannenberg AL, 1066 Dargie HJ, 834 David D. 1173 Davies GJ. 717, 956, 1098 Davignon A, 213 Dawson P, 2E Dean NC, 528 de Belder MA, 70J de Buitleir M, 1148 de Castroviejo JR, 491 De Cesare N. 433 Decho JS, 363 Deen L, 22H de Feyter PJ, 88 De Geest H, 1103 Dehmer GJ, 131, 783 Del Castillo JM, 99 de Leeuw PW, 22D Delemarre BJ, 167 de Lezo JS, 491 Deligonul U, 1, 849 DeLong J, 1180 De Luca N, 745 DeMaio SJ Jr, 471 DeMaria AN, 697, 905 Dempsey EE, 1249 de M. Zuliani MF, 99 den Heijer P, 1041 Denny DF, 363 Denys BG, 405 DeRobertis M. 1168 Detrano R, 304 Deutsch H-J, 1195

Dev V. 397

Dhalla N. 636

Devereux RB, 507, 840, 1338

Diamond GA, 702 Diggs JA, 1029 Dijkhuis JP, 22H Di Lenarda A, 504 Di Palma L, 604 DiSesa VJ, 631 Distefano S, 885 Diver DJ, 311 Dodd MG, 101 Dohrmann M. 1396 Dokler ML, 687 Dollar AL, 410, 828, 1405 Domanski MJ, 967, 1258 Domenicucci S. 588 Donnerstein RL, 399, 625, 1213 Douglas PS, 209 Downes TR. 523 Doyle JT, 1057 Drblik SP, 213 Dreifus LS, 2J Dressler FA. 909 Drici M. 65J Drici MD, 671 Drimmer AM, 642 Driscoll DJ. 768 Drumond A, 620 Dubach P, 1039 Dubner SJ, 801 Dubois C, 315 Dubois-Rande J-L, 30A Dumoulin M, 896 **Dunlap ED, 711, 841** Dunning AJ, 167 Duprez D, 674 Durack DT, 950

Eaves LJ, 1333 Edelman E. 475 Edwards EH, 23G Edwards WD, 538 Egan B, 752 Ehsani AA, 348 Eichhorn EJ, 131, 856 Eisenkramer G. 938 Eison HB, 62F Ekelund LG, 76 Ekstrom L, 90 El-Deane MSS, 1361 Elencwajg B, 801 Ellenbogen KA, 236 Ellis SG, 114, 667 El-Sherif N, 16 El-Tamimi H, 717, 1098 Enger E, 937 Enger EL, 683 Epstein M, 41F, 1221 Epstein SE, 425 Erdmann E, 812 Espada R, 545 Espiner EA, 948 Estes NAM III, 194 Ethevenot G, 66, 81 Evans GR, 1322 Ewert CO. 655 Eynde BV, 896

Durak I. 1392

Duvai RD, 1117

Duval-Moulin A-M. 30A

Fabbiocchi F, 433 Fagard R, 16D Fan Z, 16J

Ezekowitz MD, 363

Farber NE. 941 Farenq G, 83J Farlow DC, 363 Favre J. 148 Federman EB, 51F Feigenbaum H, 1123 Fein SA, 1057 Feinstein AR, 50 Feld GK, 680 Ferguson JG, 702 Ferguson JJ, 311 Ferrans VJ, 9C Ferrick AM, 1057 Ferrick KJ, 1057 Fetter J, 27 Feuer JM, 1376 Feuerer W. 448 Fields CD, 247 Filardi PP, 745 Finci L, 148 Finkelstein D, 33 Finley JP, 696 Finstad JE, 1199 Firmin D. 953 Fischetti F, 1221 Fisher MB, 50 Fisman EZ. 300 Fitzgerald ST, 1108 Fitzpatrick MA, 752 Flaker GC, 1144 Fleck RP, 680 Fleckenstein A, 211 Fleckenstein-Grun G, 211 Fleg JL, 1076 Fleiss JL, 536 Fletcher RD, 943, 1152 Florentine MS, 354 Flores ED, 783 Flowers NC, 20C Floyd WL, 549 Flugelman MY, 289 Fok TF, 102 Fontaine G. 833 Foult J-M, 513 Fouron J-C, 547 Fowler MB, 542 Francis G, 1382 Frank MJ, 498 Frank R, 83J Freedman SB, 806, 845, 1216 Freeman MR. 256 Freis ED, 1152 Frey M, 211 Friedman HZ, 1270 Friedman JD, 1022 Friedman M, 12C Friedman PL, 475 Friefeld G. 1180 Friehling TD, 832 Frishman WH, 1F, 65F Froelicher V, 304 Froelicher VF, 1039 Fromberger P, 547 Fuenmayor AJ, 1047 Fujimara 0, 1327 Fujioka S. 369 Fukatani M, 21J Fumagalli R, 1291

Gabel M, 781 Gadsbyll N, 961 Gagnon A, 276

Furman WR, 1113

Fuster V, 33B

Gaita F, 487 Galassi AR, 139, 264, 717, 1098 Galbraith TA, 109 Galla her JJ, 122 Gallino RA, 294 Gangadnaran V, 1270 Gao SZ. 1093 Garan H. 33 Garavaglia GE, 42 Gardin JM, 935 Gardiner DG, 101 Garofalo JL, 65F Garraffo R, 671 Garratt C, 1310 Garratt KN, 538 Garrison RJ, 1066 Gavaliatsis IP, 425 Gavazzi A, 993 Gelbfish J. 577 Gemitzis KD, 676 Gentili C, 335 Georgiardis A, 51C Gerstenblith G, 1113 Gheorghiade M, 609, 1236 Ghilarducci LEC, 866 Gibson DG, 19H Gibson RS, 466, 799 Gielchinsky I, 1298 Gierschik P, 812 Giles TD, 1C, 44C Gillette PC, 233 Gillis AM, 1049 Gimple LW, 1243 Ginzton LE, 730 Giorgi LV, 144, 1221 Giustetto C. 487 Given MB, 44C Glicksman F, 1305 Glossmann H, 431 Gobel FL. 599, 1199 Goddard MD, 569 Godfraind T, 581 Goicolea J, 620 Goldberg SJ, 1399 Goldenberg IF, 56, 599, 1199 Goldman L, 1087 Goldman ME, 62F Goldsmith SR, 1382 Goldstein S, 609, 1236 Golueke PJ, 1113 Gonzales R, 1072 Gonzalez F. 203 Good TH, 1221 Goodgold H, 161 Goodman P. 1396 Goodwin M. 937 Goodwin MJ, 683 Gordon J, 631 Gori C. 1162 Gornick C. 665 Gottlieb SO, 1113 Gourgon R, 1010 Grabowski EF, 10E Grace M. 1249 Graham L, 1387, 1389 Grassegger A, 431 Grasso M. 993 Grayburn PA, 856 Graziadei I. 431 Graziano G, 993 Green MV, 921

Green S. 11

Gaillard M. 30A

Greenberg SM, 65F Greene TO, 385 Greengart A, 577 Greet GS 339 Griffith M. 1310 Grignon A, 940 Groeskamp JJ, 1041 Grosgogeat Y, 83J Gross GJ. 941 Grossman E, 42 Grossman W, 725 Guazzi MD. 433 Guiney TE, 1243 Guiraudon GM, 92J, 1327 Guo J-X, 940 Guppy KH, 304 Gura GM Jr. 1221 Gurley JC, 697 Gwynne JT, 1G, 10G

Haase KK, 1253 Haerlin R. 25D Hagberg JM, 348 Hagen-Ansert S, 547 Haisch C. 1019 Haiduczok ZD, 54E Hall V, 609 Halon DA, 289 Hamer DH, 1192 Hamer HPM, 1317 Hamilton MA, 945 Hancock EW, 1078 Hand RC, 20C Haney TL, 427 Harlamert EA, 697 Harp R. 20C Harrell FE Jr. 427, 1280 Harris PJ, 845 Harrison MR, 697, 905 Hartford M, 90 Hartmann J. 937 Hartmann JR, 683 Hartzler GO, 144, 560, 822

1221 Harumi K, 11J Har-Zahav Y, 225 Hashiba K, 21J Haskell RJ, 730 Hastillo A, 401 Hautamaki K, 1389 Hawkins ET, 392 Havashi H. 180 Hayashi K, 41F Heddle WF, 1204 Hegesh J, 395 Heindel W, 1195 Heine D. 1152 Hellenbrand WE, 762 Hendren WG, 546 Henkin R, 16 Hennecken JF, 1264 Heo J. 270 Herbst M, 76 Herlitz J. 90 Hernandez E. 620 Hernandez TJ, 967, 1258 Herrmann KS, 448 Hervé C, 30A Hess ML, 401 Hewitt JK, 1333 Heywood JT, 243 Higginbotham MB, 651 Hill T. 1275

Hiller WDB, 209

Hillis LD, 155, 246, 257, 261, Himelman RB, 528, 1396 Hinderliter AL, 76 Hiraoka M, 16J Hirata K, 860 Hirota Y, 1217 Hirsch SC, 109 Hittinger L, 513 Hlatky MA, 427, 651, 1280 Hochrein H, 655 Hod H, 225, 1231 Hoff PT, 1011 Hoffman MD, 736 Hoffmeister HM, 37J Hofman Z. 343 Heilund-Carlsen P-F, 961 Holdaway I, 971 Hollander G, 577 Hollenberg M, 45 Holly RG, 866 Holmberg S, 90 Holmes DR, 815 Holmes DR Jr. 538 Homan SM, 1289 Homma N, 25J Hopp H-W, 1195 Horan LG, 20C Horton C, 1221 Hosoda S, 46J Howell J, 545 Hudon G. 462 Hugel W, 1195 Huguenard P, 30A

Ibrahim BB, 16
Ikram H, 948
Ilstrup DM, 815
Imperi G, 835
Inada M, 977
Interian A Jr, 1047, 1305
Isaaz K, 66, 81
Iseri LT, 1202
Ishandrian AS, 270
Isner JM, 247
Iwa T, 871, 1217
Iwasa M, 180

Huikuri H, 1047

Hung J-S, 126

Hunt SA, 1093

Hust R, 545

Huikuri HV, 1305

Hungerberg K, 1195

Hutter AM Jr. 1243

Huycke EC, 1131

Jackson F Jr, 1322 Jackson K, 199 Jackson R, 971 Jacobs DR Jr. 454 Jacobson AF, 1080 Jaillon P. 65J, 481 Jain A, 783 Jain P. 397 Jakobs KH, 812 Jan F, 30A Janosi A, 304 Janosik DL, 1289 Jaumin P. 581 Jensen BH, 961 Jesek JK, 343 Jiang MJ, 35F

Jimenez F, 620 Johnson WL, 144 Johnson WL, 17, 1221 Johnston DL, 172, 1004 Jolly SR, 406 Judd D, 56 Judge KW, 830 Judson WE, 1123 Jugdutt BI, 581 Julian DG, 27A Juneau C, 1343 Juneau M, 1249 Juni J, 752 Juty KR, 243

Kadena M, 21J

Kadish AH, 1148

Kaiser PJ, 1157 Kalbfleisch KR, 199 Kamakura S, 37 Kamihara S, 180 Kannel WB, 555 Kanzaki K. 94 Kao W, 609, 1236 Kapadia K, 236 Kaplinsky E, 225, 395 Kappenberger L, 191 Karlson BW, 90 Karnegis JN, 1043 Karp RB, 1206 Karsch KR. 390, 1253 Kasab SA, 1385 Kasanuki H, 46J Kaski JC, 139, 264, 717, 1098 Kass RS, 351 Kataoka H. 94 Kaufman J-M, 674 Kaufmann UP, 538 Kaul S, 466 Kaul U. 397 Kawamura K, 1217 Kawamura M, 1402 Kawano S, 16J Kawasaki T, 604 Keller A, 938 Keller MW, 691 Kellermann JJ, 300 Kelley JL, 23G Kelly DL, 1361 Kelly DT, 806, 845 Kelly SM. 247 Kemkes B, 812 Kenigsberg AE, 1374 Kennedy HL, 1289 Kennedy JW, 8A Kent KM, 1405 Keogh BE, 956 Kerbacher JJ, 23G Keren A, 998 Kern MJ, 849 Kerouac M, 276 Kerr CR. 594 Kessler KM, 1305 Keung EC, 1131 Khaja F, 1236, 1387, 1389 Khalilullah M. 240 Khan MAA, 218 Kiat H, 9B Kiely DK, 555 Kikel M, 840 Killam HAW, 20C Kilpatrick D, 319 Kim CS. 385

Kim JH, 950 Kimball BP, 6, 778 Kimmelstiel C, 834 Kindman LA, 542 King SB III, 22B, 667 Kinsella SH, 471 Kiratjoglu TK, 676 Kirkorian G, 79J Kirshenbaum JM, 25B, 631 Kisslo J, 950 Klatsky AL, 237 Kleiger RE, 799 Klein GJ, 92J, 1327 Klein LW, 982 Kleinman CS, 762 Kleinman JP, 1168 Klewer SE, 1399 Kligfield P, 926 Klinke WP. 1249 Kloner RA, 18F Koelz TJ, 1199 Kohvakka A, 97 Koito H, 817 Kolassa N. 7D Kong B, 270 Kongtahworn C, 940 Konishi J, 860 Konishi Y, 860 Konoe A, 21J, 37 Koolen JJ, 22H Kosinski EJ, 1275 Kosowsky BD, 247 Kostis JB, 186 Kostuk WJ, 1249 Kou WH, 1148 Kougioumtzidis CP, 676 Kowalchuk GJ, 10F, 1374 Kowey PR, 832 Kozina JA, 680 Krajcer Z, 106 Krakoff LR, 62F Kramer B. 982 Kramer-Fox R, 507 Krane NK, 40C Kremers MS, 1053 Krikler DM, 27F Krikler S, 27F Krone RJ, 938 Krongrad E. 252 Kubo SH. 359 Kuchar DL, 33 Kuebler W, 329 Kuga K, 16J Kulbertus HE. 315 Kumar A, 793 Kuo PC, 631

L'Abbate A, 889 Labovitz A, 849 Labovitz AJ, 642 Lacina SJ, 354 Laffel G, 631 Lai W-T, 1131 Laks MM, 730 Lamarre A, 213 Lambert CL, 8H Lambert CR, 835 Lane SE, 1275 Lang RM, 1173 Lange RA, 155, 246, 257, 261, 783 Langevin RE Jr, 247 Laniado S, 225, 1231 Lapalus P, 671 Lapointe J, 276

AUTHOR INDEX

Laraudogoitia E, 620 Larkin SW. 956 Laski PA, 1394 Lathrop DA, 711, 781 Lau K-C, 689 Laurier J. 462 LaVeau PJ, 1264 Lavine SJ, 61 Lawrenson WE, 825 Leachman DR, 106 LaBeau TA, 1270 Lecocq B, 481 Lecocq V, 481 Lee E. 528 Lee G. 940 Lee H. 565 Lee H-C, 1063 Lee KL, 651 Lee KMH, 824 Lee RT, 1366 Lee S, 304 Lee TH, 1087 Leffingwell A, 294 Lehmann KG, 1039 Lehmann MH, 199 Lellouche D. 30A Lennox SC, 19H Leone G. 604 Lesch M. 982 Lesperance J, 462 Lester WM, 1049 Lette J, 276 Levandoski SG, 736 Levine AB, 1270 Levy D. 1066 Levy JM, 1356 Lewis BS, 289 Lewis JF, 1029 Lewis SM, 1275 Lichstein E, 577 Lie JI, 1041 Lie KI, 1317 Liebert HP, 124 Liem LB, 1063, 1078 Ligon RW, 144, 560, 1221 Lijnen P, 16D Lima VC, 540 Lin F-C, 126 Linderer T, 878 Lindsay J Jr, 294, 824, 1192 Linker N, 1310 LiPreti V. 6, 778 Little T, 294, 825 Little WC, 523 Littmann L, 122 Liu Y-R, 674 Lloyd TR, 399, 1213, 1399 Lo YSA, 1063 Loaldi A, 433 Logan SA, 23G Loisance D, 513 Lønborg-Jensen H, 961 Longmore D, 953 Lord CP, 1366 Lorenz RL, 1185 Lorenzetti G. 403 Loughhead MG, 319 Loutzenhiser RD, 41F, 1221 Lowe RF, 44C Lowe T, 717 Lucchesi BR, 1011 Luckett CR, 1202 Luderitz B, 75J Luepker RV, 90

Lupi G, 588 Lusson JR, 18A Luurila OJ, 97 Lyons E, 270 Lyyski D, 1289

MacGregor GA, 46F
Machecourt J, 18A
Macieira-Coelho E, 1085
Macina G, 840
Macoviak J, 825
MacPhail B, 697
Maddahi J, 9B, 282, 1022
Maddaluna A, 900
Madison C, 1199
Madison JD, 1199
Madison K, 1199
Madea T, 565
Magata Y, 860
Magilligan DJ Jr, 392, 1387,

1389 Magnanini G, 885 Mahony C, 387 Malavasi V. 885 Malekzadeh S, 1075 Mangiardi L, 487 Mangione JA, 99 Manicardi V. 885 Mann J, 519 Manolis AS, 194 Manz M, 75J Mao J-M. 940 Maranda CR, 1249 Marcus FI, 1189 Marcus ML, 54E Marcus R, 1173 Marcus RH. 1069 Marder VJ, 2A Marek J. 937 Marek JC, 683 Margonato A, 1061 Marinchak RA, 832 Mark AL, 987 Mark DB, 651, 1280 Markowitz T. 27 Maron BJ. 1029 Marraccini P. 889 Marsch S, 270 Martin NB, 343 Martin WH III, 348 Martinelli L, 993 Martinetti M. 993 Martinez C. 363, 491 Martinez EE. 540 Martinez J, 40C Marving J, 961

Maseri A, 139, 264, 717, 956. 1098 Mason DT, 940 Massie BM, 45, 833 Mathias CJ, 636 Matlib MA, 11, 511, 841 Matoole JJ, 1043 Matsuda M, 1080 Matsuda Y, 565 Matsuhisa M, 37 Matsuzawa T, 25J Matsuzawa Y, 369 Matthay RA, 772 Matthews RV, 730 Maurer G, 668, 1168 Mauser M. 390, 1253 Maxwell K, 111 McAllister M. 1058

McAuliffe LS, 1374 McBride LR, 642 McBroom D. 1387 McCallister BD, 1221 McCallister SH, 815 McCarthy EA, 339 McComb J, 33 McConahay DR, 144, 1221 McConnell SH, 1264 McCredie RJ, 845 McDaniel WC, 1144 McDonald K, 359 McGaghie WC, 111 McGovern BA, 33 McGregor M, 1069 McIntosh CL 410 McKeever L, 937 McKeever LS, 683 McKenna WJ, 95 McNulty A, 840 Medina A, 620 Meester H. 88 Mehrotra PP, 1029 Meier B, 148 Melian F, 620 Meliones JN, 354, 820 Menendez T, 545 Menkes H. 811 Mennig D, 581 Merdler A, 289 Messenger JC, 1376 Messerli FH, 42 Messineo FC, 53J Mestroni L, 504 Meyer TE, 1069 Meyers DG, 1394 Mianulli M. 27 Michel AD, 3H Michelassi C, 889 Michels VV. 768

Nerem RM. 23G Nesto RW. 10F. 1275, 1374 Mikail A. 57C Mikhail M, 793 Neuhaus K-L, 878 Mikuriya Y, 94 Neumann A, 1173 Millard RW, 11, 711, 781, 841 Neumann AL, 1206 Newman WP III, 32C Miller DD, 51F Miller DH, 840 Ng Y-m, 689 Nguyen NX, 1131 Miller GJ, 29B Miller HI, 225, 1231 Nichol P, 569 Miller JD, 1052 Nicholls MG, 948 Miller LW, 642 Nichols TC. 783 Milne MJ, 102 Nicolaides EP, 19H Milner MR, 294 Niederhauser W, 148 Nihill MR. 218 Milstein S. 27, 599 Nimkhedkar K. 50J Minagoe S, 793 Mintz GS, 809, 1058 Nimura Y, 1082 Misaki T, 87J Nishimura M, 25J Mitten-Lewis S. 661 Nitenberg A, 513 Miyahara T, 180 Nitti C. 1061 Nixon JV, 401 Miyatake K, 1082 Modan M, 225, 1231 Nogueira EA, 99 Mohan JC, 240 Nolan PE Jr, 1371 Mohanty PK, 236 Nomeir A-M. 523 Mohiaddin R, 953 Northridge DB, 834 Notargiacomo A, 1152 Molina E, 27 Noveck HD, 982 Monrad ES, 725

Montague TJ, 378

Montarello JK, 116

Montemartini C, 993

Montenegro A, 1157

Montigny M, 213

Montilla P, 491

Montorsi P. 433

Morady F. 1148

Montain SJ, 348

Obeid M, 943 O'Byrne GT, 1022 Ochi RP, 599 O'Donnell M, 937 O'Donnell MJ, 683 O'Donoghue S, 124

Novia D. 793

Nukta E. 148

Nakatani S, 1082

Nakayama Y, 1217

Nance WE. 1333

Narahara KA, 186

Navler WG, 651

Ogasawara S, 806 Ohar JA, 1322 Ohe T. 37 Ohnishi S, 46J O'Keefe JH Jr, 144, 1221 Okin PM, 926 Olalla E, 620 Olivari MT, 56, 359 O'Loughlin J, 507 Olsen MA, 1180 Olsson G, 57J O'Neill P, 545 O'Neill PG, 172 O'Neill WW, 1270 Ong L, 11 Orander PC, 20C Oren S, 42 Orsini E, 889 O'Sullivan C, 717 O'Toole ML, 209 Oufy SA, 218 Ouyang P, 1113 Ozawa T, 180

Pacifico A, 545 Padmanabhan V, 11 Paillole C. 1010 Palatini P. 1379 Palefski P, 247 Palma S, 801 Palmer T, 116 Pan M. 491 Pandey G, 397 Panidis IP, 1072 Pantoja P, 1180 Paoletti R, 1291 Papademetriou V, 1152 Papageorgiou P, 35F Pappalardo A, 335 Parmley WW, 1H Parris TM, 1058 Pasqualetti P, 403 Passa P, 1010 Pasternak RC, 311, 725 Pastore JO, 247 Patton DR, 222 Paycha F, 1010 Pearson A, 849 Pearson JE Jr. 51C Pedersen W, 599, 1199 Pellegrini A, 900 Pennington DG, 642 Pepine CJ. 2B, 8H, 835 Perimutter RA, 762 Pernot C, 66, 81 Perrault H, 213 Pessina AC, 1379 Peters J, 354, 756 Peterson BL, 427 Pfisterer M, 304 Pflugfelder P, 1249 Phillips J, 40C Phillips RA, 62F Phillips SJ, 940 Picard M, 276 Pichard AD, 294, 824 Pieper GM, 941 Pierard LA, 315 Pierpont G, 665 Pierpont GL, 56 Pierpont MEM, 56 Pierre-Louis M-L, 410

Piessens J, 1103

Pigeon JG, 50

Pines A, 300 Pinski S. 801 Pippin JJ, 1275 Piske GJ, 655 Pistolese M, 335 Plappert T, 1386 Platia EV, 124 Plowden JS, 711, 781 Pocock W, 1069 Podrid PJ, 1189 Polese A, 433 Pollak PT, 1138 Pollock SG, 466, 691 Popma JJ, 131 Porter GA, 22E Powell D, 1180 Pozzi R, 993 Prasad ARS, 23G Prati PL, 900 Preisack M, 390 Prichard BNC, 11D Prineas RJ, 454 Prisant LM, 498 Pritchett ELC, 339 Pritzker M, 599 Pritzker MR, 1199 Pryor DB, 427, 651, 1280 Przyklenk K. 18F Pucci A, 993 Punja S, 967, 1258 Pupita G, 139, 264, 1098

Qi A, 594 Quale J, 834

Rabinowitz B, 225 Racioppa A, 1379 Rackley CE, 1034 Radtke H. 30D Rahal DP, 222 Rahimtoola SH, 793 Rajani M. 397 Ram J, 806 Ramo MP, 781 Ramos RG, 1270 Rao A, 825 Rao PS, 1356 Rao SR, 363 Raphael DA, 614 Raponi M, 745 Rath S, 225, 1231 Ravagnani P, 433 Razvi S. 247 Rector TS, 359 Redd RM, 1289, 1322 Reddy PS, 405 Reddy S. 397 Rees S, 953 Reeves WC, 406 Rehnqvist N, 57J, 61J Reichek N, 209 Reiser P. 11 Rejano A, 491 Remetz MS, 1264 Renondin J-C, 11D Resser K, 1022 Resser KU, 282 Reybrouck T, 896 Rhodes C, 956 Ribeiro PA, 1385 Riccardi R, 487 Ricciarde 1 3, 745 Richards AM, 948 Riddle JM, 392

Rimmer J, 1019 Ring WS, 56 Rink DL, 940 Risa AL, 900 Risenfors M, 90 Ritchie AH, 594 Roberts CS, 1209 Roberts R, 172, 799 Roberts WC, 1B, 3C, 324, 410, 552, 693, 828, 909, 959, 1075, 1084, 1209, 1405, 1408 Robins J, 507 Robinson K, 27F, 95 Rockman HA, 1343 Rodrigues EA, 1022 Roeller SK, 1199 Rokey R. 172, 1004 Roks C, 569 Rolnitzky LM, 536 Roman MJ, 507, 1338 Romero M, 491 Romhilt D. 401 Rosen RE, 1264 Rosenberg J, 294 Rosenblum J, 982 Rosenburg H, 401 Rosenfeld LE, 762 Rosenfield K, 247 Rosenthal A, 128, 354, 756 Rosenthal E, 116 Rosenthal J, 25D Rosiello G, 745 Rosman HS, 1387, 1389 Ross AM, 17B Ross J Jr. 809 Ross JJ, 1058 Rossi AF, 685 Rossi G, 885 Rossi GP, 1379 Roth A, 225, 1231 Rothschild A, 65F Rothschild M, 65F Rotstein Z, 225 Rottman JN. 33 Rouan GW, 1087 Rougier I, 83J Rouleau J-L, 1343 Rouleau JR, 1284 Rowan RA, 1063 Rowland E, 95 Rozanski A, 282 Rozek MM, 23G Ruddy TD, 51F Ruskin JN, 33 Rutherford BD, 144, 1221 Ryan T, 1123

Sabbah HN, 392
Sacks FM, 725
Sahin A, 1392
Sahn DJ, 547
Saito H, 180
Saji H, 860
Saji H, 860
Sakai Y, 1217
Saksena S, 1298
Salvaneschi L, 993
Salvi A, 504
Samii M, 1199
Sancho M, 491
Sander GE, 44C
Sanders KH, 7D
Sandhu S, 304
Sane DC, 549

Sanfilippo AJ, 1349 Saoudi N, 79J Sareli P, 1069, 1173 Sarembock IJ, 691 Sasyniuk BI, 29J Satler LF, 1034 Sato I, 37 Sato T, 11J Saviolo R, 787 Sawada SG, 1123 Sawyer W, 218, 1385 Sbirrazzuoli V. 671 Schaefer S, 38E Schechtman KB, 799 Schelbert HR, 46E Schicha H, 1195 Schieken RM, 1333 Schiele F, 18A Schildkraut JM, 555 Schiller NB, 528, 1396 Schlief R, 374 Schmid J-J, 304 Schmieder R. 42 Schmitt C. 329 Schnabel P, 812 Schnaper HW, 203 Schneeweiss A, 395 Schneider H. 547 Schoels W, 329 Scholz K-H, 448 Schook CE, 30D Schreiber TL, 840 Schröder R, 878 Schroeder JS, 1093 Schuder JC, 1144 Schudt C, 431 Schuger CD, 199 Schulhoff N, 577 Schulman DS, 772 Schwartz A, 11, 3i Schwartz CJ, 23G Schwartz DJ, 799 Schwartz PJ, 424 Scott WJ, 1206 Scragg R, 971 Scruggs KD, 343 Sechtem U, 1195 Seifried E, 448 Seiler SM, 1289 Seipel L, 37J Seki K, 565 Sekiya S, 11J Seligschn U, 225, 1231 Selle JG, 122 Selwyn AP, 475 Senda M, 860 Serruys P, 88 Serwer GA, 354, 756 Severi S, 889 Sevilla DC, 696 Shah PK, 9B, 668 Shandling AH, 1376 Shani J. 577 Shapiro W, 186 Sharma AD, 92J, 1138, 1327 Sharma S, 397 Shaw L, 161 Shaw RE, 667 Shawl FA, 967, 1258 Sheehan FH, 440, 661 Shefer A, 289 Sheldahl LM, 736 Shem-Tov A, 395 Sheps DS, 76, 591

AUTHOR INDEX

Shimizu A, 21J, 37 Shimomura K, 37 Shimshak TM, 1221 Shiner R, 300 Shiomi K, 565 Shurmur SW, 1374 Sibley AE, 57C Siegel WC, 1280 Siegler IC, 427 Silberberg JS, 222 Silke B. 28H Silverman ME, 471 Silvestri F, 504 Simpson RJ Jr, 111 Sinak LJ. 646 Singer M. 1211 Singh A, 1361 Singh SN, 943 Sink JD, 546 Skinner JR, 940 Smith HS. 725 Smith KM, 523 Smith MD, 697 Snider AR, 354, 756, 820 Sniderman AD, 222 Soberman J. 65F Solal AC, 1010 Solo M, 1053 Sonel A, 1392 Soufer R, 772 Sowton E, 191 Spann S, 203 Spaude S, 560 Spector M, 940 Spencer JE, 1029 Spencer KT, 1173 Spitzer M. 507 Spodick DH, 787, 817, 1085 Sprague EA, 23G Sprague MK, 1289 Sridharan MR, 20C Srinivasan SR, 32C Staessen J, 16D Stage P, 961 Stamato N. 937 Stamato NJ, 683 Stammen F, 1103 Stanford W, 54E Stanley P, 213 Starc TJ, 252 Starke H, 1394 Starksen NF, 1396 Starling RC, 109 Stein B, 33B Stein PD. 392, 1387, 1389 Steinbrunn W, 304 Steinhaus DM, 1221 Steinman RC, 536 Steinman RT, 199 Steinmetz JE, 697 Stephenson HE Jr, 1144 Stern S, 426, 998 Stevenson LW, 945 Stewart KP, 523 Stinson EB, 1093 St John Sutton M, 1366 Stoltz J, 1289 Stone GW, 560, 822 Stone PH, 256 Stork TV, 655 Stovall JR, 1180 Stratienko AA, 691 Stratmann HG. 987 Stratton JR, 1080

Strauss E, 363 Streitz D. 1199 Stukel T. 519 Stulbarg MS, 528 Sugimoto T, 33J Sugiura T, 977 Sugiyama S, 180 Sumimoto T. 977 Sunami A, 16J Sundberg S, 97 Sung RJ, 1131 Sung RYT, 102 Superko HR, 31G Suryapranata H, 88 Suwa M. 1217 Svenson RH, 122 Swank R, 1108 Swanson KT, 19H Swerdlow CD, 1063 Szlachcic J, 45, 833

Tadavarthy SM, 1199 Taddei T. 1162 Takashima H, 977 Takayama Y. 977 Takeuchi E. 1402 Takeuchi M, 977 Taliercio CP, 815 Tamaki N, 860 Tamari I, 811 Tamura A, 94 Tamura Y, 1011 Tanaka H. 25J Tanaka M. 1402 Tanaka N, 1082 Tanganelli P, 504 Tanigawa M, 21J Tanswell P. 448 Tarui S, 369 Tarumi N, 977 Tate DA, 783 Tavel M, 300 Tavolaro 0, 513 Taylor KM, 956 Taylor S, 1204 Taylor SH, 28H Taymans-Robert AR, 614 Tchou PJ, 199 Tebbe U, 448, 878 Tejero I, 491 Tenney R, 840 Teo KK, 636 Teplitsky I, 811 Terry BE, 1361 Thandroyen F, 186 Thangathurai D, 793 Thapar MK, 1356 The Diltiazem Reinfarction Study Research Group, 799 Theissen P, 1195 The MILIS Study Group, 256 Theodoropoulos S, 636 Thieme G. 30D Thiery M, 674 Thomas EL, 343 Thomas LA, 1376 Thompson A, 66 Thompson JA, 401 Threefoot SA, 51C Till J, 424 Tillisch JH, 945 Toda I, 33J

Tomlinson B, 11D Tommaso C, 1E Tommaso CL, 33E Tonet J, 83J Tonkin AM, 1204 Toon RS, 940 Topol EJ, 667 Topol. EJ, 114 Touboul P, 79J Toy W, 29J Tracy C, 943 Tracy RE, 32C Tranchesi B Jr, 229 Trimarco B, 745 Trippel DL, 233 Tristani FE. 736 Tronge JE, 801 Tsubota M, 87J Tsutsumi T, 11J Tubau JF, 45, 833 Tullner WF, 124 Tullo NG, 1298 Turitto G, 16, 900 Turpie AGG, 41B Twidale N, 1204 Tzivoni D, 426

Uedelhoven WM, 1185 Underwood R, 953 Urban P, 148 Uretsky BF, 405

Vaitkevicius P, 1076 Valantine HA. 1093 Valente AJ, 23G Valin H. 191 Valois M. 29J Van Decker W. 1072 van den Brand M, 88 Van der Hauwaert LG, 896 van Diik RB. 1041 Vandormael M, 849 Vandormael MG, 1 Van Gelder IC, 1317 Van Gilst WH, 1317 Vanhaecke J. 1103 Van Hoecke J. 674 Van Hoof R, 16D Vanoverschelde J-LJ, 614 van Royen E, 167 Van Tassel P, 1199 Van Tassel RA, 1199 Van Train KF, 1022 Van Trappen Y, 674 van Vlies B. 167 van Wezel HB, 22H Van Wijk LM, 1317 van Zwieten PA, 1D, 1I, 38D, 1171 Varma SK, 871 Vaughan DE, 631 Vecchio C. 588 Vecht RJ, 19H Vejar M, 139, 264, 717 Velasquez MT, 203 Venditti FJ. 33 Veneri L, 885

Vergroesen I. 22H

Vermeulen A, 674 Vermillion RP, 128

Verstraete M, 229

Vetrovec GW, 3F, 27E

Verma SP, 23H

Vernant P, 30A

Vick GW III, 1004 Vigano M, 993 Viljoen JF, 793 Villanueva P, 825 Villarreal D, 1361 Vincent RN, 687 Visser CA, 22H, 167 Viietstra RE, 538, 815 Voelker W, 390, 1253 von Dollen TW, 498 Vrolix M, 1103

Wackers F, 363 Wagner GS, 696 Wajman A, 671 Waldecker B. 329 Walker M, 1199 Walker SJ, 319 Wallace RB, 1405 Wallin JD, 16H Walls JT. 1144 Walsh M, 236 Walter KE, 987 Wambsgans KC, 343 Wang C-H, 392 Wang PJ, 475 Ward D, 424, 1310 Ward NE, 830 Warnica JW, 581 Warnica W, 1249 Warnock M, 1396 Wasserman AG, 17B Watanabe Y. 25J, 97J Waters D. 276, 462, 1249 Watson DD, 466, 871 Wattigney W, 32C Weaver WD, 8A Webb S, 406 Webber LS, 32C Weber HS, 762 Weber PC, 1185 Wegscheider K, 878 Weigel TJ, 768 Weinstein R, 247 Weintraub WS, 708 Weir EK, 665 Weisberg MC, 1087 Weiss RJ. 833 Weiss RM, 54E Wells P, 1053 Wells PJ, 783 Welslau R, 1195 Wennerblom B, 90 Wexler L. 16E Whitaker MP, 591 White CW, 462 Whiting RL, 3H Wibel F. 27 Wiens RD, 1289 Wilchfort SD, 385 Wilcox 1, 845 Wilke NA, 736 Wilken MK, 1394 Wilkinson WE, 339 Williams EMV. 6J Williams GA, 987 Williams M, 406 Williams RB Jr. 427, 1280 Williams WH, 687 Willman VL, 642 Wilmore JH, 343 Wilson AD, 1356 Winsor T, 57C Wiseman A, 950

Tofler GH, 256

Tokunaga K, 369

Wisenberg G, 569
Witkowski FX, 378
Wittes J, 636
Woelfel A, 832
Wolbach RA, 35H
Wolf GL, 1E, 60E
Wolf M, 30A
Wolf GS, 1052
Woo M, 945
Woodruff R, 849
Woollard D, 971
Woosley RL, 943

Work JW, 702 Wright JG, 1076 Wurst W, 30D Wurzel M, 811 Wyse DG, 1049

Xie D-Y, 940

Yacoub M, 636 Yamashita K, 860 Yan W-D, 940 Yano S, 94 Yee R, 92J, 1327 Yeung-Lai-Wah JA, 594 Yi FP, 1394 Yokota M, 180 Yoneda Y, 1217 Yonekura Y, 860 Yorozu T, 565 Young M-L, 1052 Young P, 631 Younis LT, 1, 161 Yousef SA, 218 Yurtarslani Z, 1392 Yusurf S, 636

Zahav YH, 1231 Zanchi E, 900 Zaret BL, 772 Zarich SW, 1374
Zatuchni J, 696
Zeff RH, 940
Zernig G, 431
Zezulka AV, 28H
Zimmerman JM, 11
Zivelin A, 225, 1231
Zohman LR, 186
Zola B, 840
Zoneraich S, 1037
Zorn J, 211
Zuarini A, 885
Zusman RM, 51F
Zweifler A, 752

Ablation of plaque

Initial angiographic results in ablation of atherosclerotic plaque by percutaneous coronary excimer laser angioplasty without subsequent balloon dilatation; 1253

Abstracts, American Academy of Pediatries

Abstracts, American Academy of Pediatrics, Section on Cardiology, 31st Annual Meeting, Chicago, Illinois. October 20-22, 1989; 413

Accelerated atherosclerosis Diffuse coronary vasospasm and accelerated atherosclerosis in a transplanted human heart: 825

Accessory pathway
Reversal of electrophysiologic effects of flecainide on the accessory pathway by isoproterenol in the Wolff-Parkinson-White syndrome: 194

Acquired immunodeficiency syndrome

Severe pulmonary hypertension and cor pulmonale in the acquired immunodeficiency syndrome: 1396

Active bacterial endocarditis Indium-111 leukocyte scintigraphic detection of

mitral valve vegetations in active bacterial endocarditis: 1080

Active infective endocarditis

Echocardiographic detection and clinical significance of left atrial vegetations in active infective endocarditis; 950

Active myocardial infarction Tolerance with low dose intravenous

nitroglycerin therapy in acute myocardial infarction; 581

Acute coronary occlusions

High incidence of acute coronary occlusions complicating percutaneous transluminal coronary angioplasty for angina pectoris; 665

Acute heart failure

Abrupt homeostatic responses to transient intracardiac occlusion during balloon valvuloplasty; 491-

Acute myocardial infarction

See also Myocardial infarction

A physiologically based model of creatine kinase-MB release in reperfusion of acute myocardial infarction: 11

Clinical characteristics and outcome of acute myocardial infarction in patients with initially normal or nonspecific electrocardiograms (a report from the

Multicenter Chest Pain Study); 1087 Comparison of time- and frequency domainbased measures of cardiac parasympathetic activity in Holter recordings after myocardial infarction; 536

Effect of a media campaign on delay times and ambulance use in suspected acute myocardial infarction; 90

Fatal azide-induced cardiomyopathy presenting as acute myocardial infarction; 830

Impact of late coronary artery reperfusion on left ventricular function one month after acute myocardial infarction (results from the ISAM study); 878

Importance of early recurrent ischemia on oneyear survival after non-Q-wave acute myocardial infarction; 799

Intermittent, dose-related fluctuations of pain and ST elevation during infusion of recombinant tissue plasminogen activator during acute myocardial infarction; 225

Nuclear magnetic resonance imaging of acute myocardial infarction within 24 hours of chest pain onset; 172

Oxygen delivery, oxygen consumption and hemoglobin-oxygen affinity in acute myocardial infarction; 977

Predictive value of indium-111 antimyosin uptake for improvement of left ventricular wall motion after thrombolysis in acute myocardial infarction; 167

Prognosis after acute myocardial infarction in patients with and without residual anterograde coronary blood flow; 155

Qualitative and quantitative comparison of amounts of narrowing by atherosclerotic plaques in the major epicardia! coronary arteries at necropsy in sudden coronary death, transmural acute myocardial infarction, transmural healed myocardial infarction and unstable angina pectoris; 324

Single-bolus injection of recombinant tissuetype plasminogen activator in acute myocardial infarction; 448

Spontaneous reversible spasm in an internal mammary artery graft causing acute myocardial infarction; 822

Acute percutaneous transluminal coronary angioplasty
See also Percutaneous transluminal coronary

angioplasty

Early and late results of coronary angioplasty without antecedent thrombolytic therapy for acute myocardial infarction: 1221

Adenosine

Adenosine in altering short- and long-term treatment of supraventricular tachycardia in infants; 685

Comparison of adenosine and verapamil for termination of paroxysmal junctional tachycardia; 1310

Adibendan

Acute hemodynamic effects of adibendan, a new phosphodiesterase inhibitor, for severe congestive heart failure; 390

Adolescents

Comparison of cardiovascular adjustments to exercise in adolescents 8 to 15 years of age after correction of tetralogy of Fallot, ventricular septal defect or atrial septal defect: 213

Percutaneous catheter closure of the ductus arteriosus in children and young adults; 218

Adrenergic beta-receptor blockade

Effects of atenolol on left ventricular hypertrophy and early left ventricular function in essential hypertension; 1157

Afterload

Effect of blood pressure and afterload on Doppler echocardiographic measurements of left ventricular systolic function in normal subjects; 905

Effects of left ventricular preload and afterload on ascending aortic blood velocity and acceleration in coronary artery disease; 856

Age

Impact of age on echocardiographic left ventricular mass in a healthy population (The Framingham Study); 1066

Influence of age and sex on left ventricular filling at rest in subjects without clinical cardiac disease: 646

Aging

Effect of exercise training in 60- to 69-year-old persons with essential hypertension; 348 Mechanism of altered pattern of left ventricular filling with aging in subjects without cardiac disease: 523

Alpha-adrenergic receptors

Lack of evidence for alpha-adrenergic receptormediated mechanisms in the genesis of ischemia in syndrome X; 264

Alpha₂-adrenoceptors

Effectiveness of doxazosin in systemic hypertension: 203

Altitude

Effects of low altitude exposure on 24-hour blood pressure and adrenergic activity: 1379

Ambulatory monitoring

See also Holter monitoring A comparison of amplitude-modulated and frequency-modulated ambulatory monitoring systems: 76

Effects of low altitude exposure on 24-hour blood pressure and adrenergic activity; 1379

Ambulatory myocardial ischemia Influence of beta-adrenergic blockade defined by time series analysis on circadian variation of heart rate and ambulatory myocardial ischemia; 835

Amlodarone

Correlation of amiodarone dosage, heart rate, OT interval and corneal microdeposits with serum amiodarone and desethylamiodarone concentrations: 1138

Intravenous amiodarone for the rapid treatment of life-threatening ventricular arrhythmias in critically ill patients with coronary artery disease: 599

Long-term effects of amiodarone on hepatic function; 95

Anatomy

An echocardiographic and anatomic description of the donor-recipient atrial anastomosis after orthotopic cardiac transplantation: 109

Anemia

Role of anemia in the pathogenesis of left ventricular hypertrophy in end-stage renal disease; 222

Angina, postinfarction

Importance of early recurrent ischemia on oneyear survival after non-Q-wave acute myocardial infarction: 799

Angina pectoris

Comparison of atenolol and nifedipine in chronic stable angina pectoris; 186

Early detection of myocardial ischemia by myocardial free fatty acid extraction in patients with exercise-induced angina pectoris; 180

Effects of sublingual nitrate in patients receiving sustained therapy of isosorbide dinitrate for coronary artery disease; 565

Frequency of symptoms suggestive of dynamic coronary artery disease in patients referred for coronary angiography; 1374

High incidence of acute coronary occlusions complicating percutaneous transluminal coronary angioplasty for angina pectoris; 665 Long-term variability of angina pectoris and

electrocardiographic signs of ischemia in syndrome X: 139

Sustained effect of and lack of development of tolerance to controlled-release isosorbide-5mononitrate in chronic stable angina pectoris: 569

Usefulness of thallium-201 scintigraphy in predicting the development of angina pectoris in hypertensive patients with left ventricular hypertrophy; 45

Angina with normal coronary arteries

Lack of evidence for alpha-adrenergic receptormediated mechanisms in the genesis of ischemia in syndrome X: 264

Angiography

In vivo assessment of a digital angiographic method to measure absolute coronary artery diameters; 131

Transient atrioventricular block resulting from left ventricular angiography in infants with ventricular septal defect; 128

Usefulness of esophageal pill electrode atrial pacing with quantitative two-dimensional echocardiography for diagnosing coronary artery disease; 730

Angioplasty

See also Percutaneous transluminal coronary angionlasty

Balloon dilatation of symptomatic subacute intimal dissection presenting as restenosis; 987

Effects of occlusion of the left anterior descending coronary artery during angioplasty on right-sided cardiac pressures and electrocardiographic changes; 577

Identifying patients at high risk for restenosis after percutaneous transluminal coronary angioplasty for unstable angina pectoris; 289

Left main coronary angioplasty: early and late results of 127 acute and elective procedures; 144

Magnum wire for balloon recanalization of chronic total coronary occlusions; 148

Usefulness of fish oil supplements in preventing clinical evidence of restenciss after percutaneous transluminal coronary angioplasty; 294

Angioplasty, perculaneous transluminal coronary

Percutaneous transluminal angioplasty of a totally occluded venous bypass graft: a challenge that should be resisted; 88

Prognostic significance of silent myocardial ischemia detected by early treadmill exercise after coronary angioplasty; 1

Angiotensin converting enzyme inhibitor

Attenuation of the pressor response to intravenous furosemide by angiotensin converting enzyme inhibition in congestive heart failure; 1382

Anterior ischemia

Prognostic significance of ST potentials determined by body surface mapping in inferior wall acute myocardial infarction; 319

Anterior location

Cardiac event rate after non-Q-wave acute myocardial infarction and the significance of its anterior location; 1236

Antiarrhythmic agents

Effect of selective intracoronary antiarrhythmic drug administration in sustained ventricular tachycardia; 475

Generic substitution of antiarrhythmic drugs; 1371

Intravenous amiodarone for the rapid treatment of life-threatening ventricular arrhythmias in critically ill patients with coronary artery disease; 599 Usefulness of serial pulmonary function testing as an indicator of amiodarone toxicity; 1322

Antiarrhythmic drug efficacy

Conversion of sustained into nonsustained ventricular tachycardia during therapy assessment by programmed ventricular stimulation: criterion for a positive drug effect? 329

Antiarrhythmic therapy

Reemployment following implantation of the automatic cardioverter defibrillator; 199

Antiarrhythmic therapy, long-term Natural history of potentially lethal ventricular arrhythmias in patients treated with longterm antiarrhythmic drug therapy; 1289

Anticoagulation

Decision ans yes concerning the application of echocardiography to the diagnosis and treatment of mural thrombi after anterior wall acute myocardial infarction; 708

Antimyosin

Predictive value of indium-111 antimyosin uptake for improvement of left ventricular wall motion after thrombolysis in acute myocardial infarction; 167

Antiplatelet effect

Superior antiplatelet action of alternate day pulsed dosing versus split dose administration of aspirin; 1185

Aorta

Two-dimensional echocardiographic aortic root dimensions in normal children and adults; 507

Aortic acceleration

Effects of left ventricular preload and afterload on ascending aortic blood velocity and acceleration in coronary artery disease; 856

Aortic dilatation

Two-dimensional echocardiographic aortic root dimensions in normal children and adults; 507

Aortic dissection

Application of abdominal and transesophageal echocardiography as a guide for insertion of intraaortic balloon pump in aortic dissection; 1082

Aortic incompetence

Frequence and significance of aortic valve thickening in older asymptomatic patients and its relation to aortic regurgitation; 1061

Aortic regurgitation

Correlation of distance from subaortic membrane to base of the right aortic valve cusp and the development of aortic regurgitation in mild discrete subaortic stenosis; 395

Influence of transmitral filling dynamics on continuous-wave Doppler assessment of aortic regurgitation by half-time methods; 614

Aortic root

Two-dimensional echocardiographic aortic root dimensions in normal children and adults; 507

Aortic stenosis

See also Stenosis

Intermediate-term follow-up results of balloon aortic valvuloplasty in infants and children with special reference to causes of restenosis; 1356

Usefulness of the Doppler mean gradient in evaluation of children with aortic valve stenosis and comparison to gradient at catheterization; 756 **Aortic thickening**

Frequence and significance of aortic valve thickening in older asymptomatic patients and its relation to aortic regurgitation; 1061

Aortic valvular stenosis

Coronary artery disease in patients 35 years of age or older with valvular aortic stenosis; 811

Aortic velocity

Effects of left ventricular preload and afterload on ascending aortic blood velocity and acceleration in coronary artery disease; 856

Aortocoronary bypass grafts

Acute myocardial infarction complicating recanalization of aortocoronary bypass grafts with urokinase therapy; 683

Arrhythmias

Cardiorespiratory response to exercise in congenital complete atrioventricular block; 896

Effects of diuretic therapy and exercise-related arrhythmias in systemic hypertension; 1152 Generic substitution of antiarrhythmic drugs;

1371 Magnesium sulfate therapy for sustained monomorphic ventricular tachycardia; 1202

Predictors of rhythm disturbances and subsequent morbidity after the Fontan operation: 762

Random and nonrandom behavior of symptomatic peroxysmal atrial fibrillation;

Relation between ventricular function and antiarrhythmic responses to sotalol; 943

Arterial hypertension

Improvement of diastolic function after reversal of left ventricular hypertrophy induced by long-term antihypertensive treatment with tertatolol; 745

Arteriography

Comparative evaluation of coronary stenoses using fluid dynamic equations and standard quantitative coronary arteriography; 6

In vivo assessment of a digital angiographic method to measure absolute coronary artery diameters; 131

Asian-Americans

Blood pressure among Asian-Americans living in Northern California; 237

Atenolol

Atenolol in children with supraventricular tachycardia; 233

Comparison of atenolol and nifedipine in chronic stable angina pectoris; 186

Comparison of blood pressure response to heat stress in sauna in young hypertensive patients treated with atenolol and diltiazem; 97

Effects of atenolol on left ventricular hypertrophy and early left ventricular function in essential hypertension; 1157

Atherectomy

Atherectomy of the left main coronary artery with percutaneous cardiopulmonary bypass support; 114

Atherosclerosis

Predictors of success in percutaneous transluminal coronary angioplasty of chronic total occlusions; 1264

Athletes

Left ventricular structure and function in professional basketball players; 1072 Preparticipation echocardiographic screening for cardiovascular disease in a large, predominantly black population of collegiate athletes; 1029

Prevalence of multivavular regurgitation in athletes; 209

Athletic heart

Noninvasive evaluation of cardiac structure and function in alpinists; 676

Atrial fibrillation

Effectiveness of intravenous propafenone for conversion of atrial fibrillation and flutter of recent onset; 335

Efficacy and safety of flecainide acetate in the maintenance of sinus rhythm after electrical cardioversion of chronic atrial fibrillation or atrial flutter: 1317

Influence of cardiac pacing mode on the longterm development of atrial fibrillation; 1376

Random and nonrandom behavior of symptomatic paroxysmal atrial fibrillation; 339

Atrial flutter

Effectiveness of intravenous propafenone for conversion of atrial fibrillation and flutter of recent onset; 335

Efficacy and safety of flecainide acetate in the maintenance of sinus rhythm after electrical cardioversion of chronic atrial fibrillation or atrial flutter: 1317

Atrial natriuretic factor

Increase in plasma atrial natriuretic factor during ventriculoatrial pacing; 236

Inefficacy of daily single bolus dose atrial natriuretic factor in chronic congestive heart failure: 948

Atrial natriuretic peptide

Increases in atrial natriuretic peptide after delivery and in the puerperium; 674

Atrial pacing

Usefulness of esophageal pill electrode atrial pacing with quantitative two-dimensional echocardiography for diagnosing coronary artery disease; 730

Atrial septal defect

Comparison of cardiovascular adjustments to exercise in adolescents 8 to 15 years of age after correction of tetralogy of Fallot, ventricular septal defect or atrial septal defect: 213

Natural course of atrial septal aneurysm in children and the potential for spontaneous closure of associated septal defect; 998

Atrioventricular block

Transient atrioventricular block resulting from left ventricular angiography in infants with ventricular septal defect; 128

Atrioventricular junction, catheter ablation of

Morphologic findings after catheter ablation of the atrioventricular junction; 1049

Atrioventricular nodal conduction

Dynamics of atrioventricular nodal conduction ratios of reverse alternating Wenckebach periods; 1047

Atrioventricular node reentrant tachycardia

Role of intravenous isoproterenol in the electrophysiologic induction of atrioventricular node reentrant tachycardia in patients with dual atrioventricular node pathways; 1131

Atrioventricular node reentry

Operative therapy of atrioventricular node reentry and results of an anatomically guided procedure: 1327

Atrioventricular reentrant tachycardia

Comparison of adenosine and verapamil for termination of paroxysmal junctional tachycardia; 1310

Atropine

Physiologic relation between cardiac cycle and QT duration in healthy volunteers; 481

Automated blood pressure

Evaluation of a microprocessor-controlled sphygmomanometer for recording blood pressure during exercise; 806

Automatic implantable cardioverter-defibrillator

Adverse effects of permanent cardiac internal defibrillator patches on external defibrillation: 1144

Autonomic nervous system

Decreased spontaneous heart rate variability in congestive heart failure; 1162

Azide-induced cardiomyopathy Fatal azide-induced cardiomyopathy presenting

as acute myocardial infarction; 830 **Balloon mitral valvotomy**

Comparison of results of percutaneous balloon

mitral valvotomy using conscautive single (25 mm) and double (25 mm and 12 mm) balloon techniques; 1385

Balloon pulmonary vaivuloplasty Rapid T-wave normalization after balloon

pulmonary valvuloplasty in children; 399

Balloon valvuloplasty

Abrupt homeostatic responses to transient intracardiac occlusion during balloon valvuloplasty; 491

Combined percutaneous mitral and aortic balloon valvuloplasty; 620

Intermediate-term follow-up results of balloon aortic valvuloplasty in infants and children with special reference to causes of restenosis; 1356

Percutaneous double balloon mitral valvuloplasty in pregnant women; 99

Barlow's syndrome

Scanning electron microscopy of operatively excised severely regurgitant floppy mitral valves; 392

Bayesian analysis

Comparison of three Bayesian methods to estimate posttest probability in patients undergoing exercise stress testing; 1117

International application of a new probability algorithm for the diagnosis of coronary artery disease; 304

Beta-adrenergic blockade

Efficacy of intravenous propranolol for suppression of inducibility of ventricular tachyarrthythmias with different electrophysiologic characteristics in coronary artery disease; 1305

Influence of beta-adrenergic blockade defined by time series analysis on circadian variation of heart rate and ambulatory myocardial ischemia; 835

Beta blockade

Comparison of the effects of pindolol and propranolol on exercise performance in young men with systemic hypertension; 343 Effects of diltiazem alone or with isosorbide dinitrate or with atenolol both acutely and chronically for stable angina pectoris; 717

Improvement of diastolic function after reversal of left ventricular hypertrophy induced by long-term antihypertensive treatment with tertatolol: 745

Influence of beta blockade on exercise capacity and heart rate response after human orthotopic and heterotopic cardiac transplantation; 636

Bidirectional ventricular tachycardia

Association of bidirectional ventricular tachycardia with familial sudden death syndrome; 1078

Bioprosthetic valves

Color flow Doppler evaluation of cardiac bioprosthetic valves; 1389

Biopsy

Histopathologic and electrophysiologic correlations in idiopathic dilated cardiomyopathy and sustained ventricular tachyarrhythmia; 1063

Björk-Shiley prosthetic valve

Diagnostic role of intraoperative epicardial echocardiography following complications of mitral valve replacement with the Bjork-Shiley prosthetic valve; 1402

Blood coagulation factors

Effect of weight loss on coagulation factors VII and X: 519

Blood flow

Prognosis after acute myocardial infarction in patients with and without residual anterograde coronary blood flow; 155

Blood pressure

See also Hypertension; Systemic hypertension Blood pressure among Asian-Americans living in Northern California; 237

Effects of low altitude exposure on 24-hour blood pressure and adrenergic activity; 1379

Evaluation of a microprocessor-controlled sphygmomanometer for recording blood pressure during exercise; 806

Impact of age on echocardiographic left ventricular mass in a healthy population (The Framingham Study); 1066

Usefulness of twenty-four-hour blood pressure patterns and response to short-term sodium restriction in normotensive subjects in detecting a predisposition to systemic arterial hypertension; 604

Body surface potential mapping The clinical utility of body surface potential mapping in coronary artery disease; 378

Body weight

Effect of weight loss on coagulation factors VII and X; 519

Bradycardia

Correlation of amiodarone dosage, heart rate, OT interval and corneal microdeposits with serum amiodarone and desethylamiodarone concentrations; 1138

Bundle branch block

Characteristics associated with early (A3 months) versus late (>3 months to A3 years) mortality after acute myocardial infarction; 315

Calcific aortic stenosis

Ultrasonic debridement of the aortic valve with six-month echocardiographic follow-up; 1206

Calcium, myocardial Analysis of calcium, zinc, magnesium, iron and copper content in myocardium and stenotic mitral valves; 1392

Calcium antagonist

Effects of diltiazem alone or with isosorbide dinitrate or with atendiol both acutely and chronically for stable angina pectoris; 717

Cardiac angiography

Nephrotoxicity of nonionic contrast media after cardiac angiography; 815

Cardiac arrest

Intravenous amiodarone for the rapid treatment of life-threatening ventricular arrhythmias in critically ill patients with coronary artery disease; 599

Reemployment following implantation of the automatic cardioverter defibrillator; 199

Cardiac arrhythmias

Morning increase in the time of onset of sustained ventricular tachycardia; 1204 Transcoronary techniques and cardiac arrhythmias: 534

Cardiac Arrhythmia Suppression Trial, the

Lessons to be learned from the Cardiac Arrhythmia Suppression Trial; 1189

Cardiac catheter

The cardiac catheter: past, present and future; 1034

Cardiac catheterization

Effect of selective intracoronary antiarrhythmic drug administration in sustained ventricular tachycardia; 475

The cardiac catheter: past, present and future; 1034

Cardiac disease in opiate addicts

Modes of death and types of cardiac diseases in opiate addicts: analysis of 168 necropsy cases; 909

Cardiac masses

Natural course of atrial septal aneurysm in children and the potential for spontaneous closure of associated septal defect; 998

Cardiac output

Effect of tricuspid regurgitation on the reliability of the thermodilution cardiac output technique in congestive heart failure;

Hemodynamic changes during sickle cell crisis;

Limitations of the metabolic rate meter for measuring oxygen consumption and cardiac output; 783

Cardiac output measurement

Noninvasive measurement of cardiac output during surgery using a new continuous-wave Doppler esophageal probe: 793

Cardiac pacing, artificial

Prognostic value of atrial pacing and * 201 scintigraphy in patients with chest pain; 987

Cardiac parasympathetic activ(ly Comparison of time- and frequency domain-

based measures of cardiac parasympathetic activity in Holter recordings after myocardial infarction: 536

Cardiac rehabilitation

Effects of high resistance training in coronary artery disease; 866

Response to dynamic exercise of the orthotopically transplanted human heart in men immunosuppressed with cyclosporine; 401

Cardiac tamponade

Use of venous contrast echocardiography for diagnosis of cardiac tamponade; 691

Cardiac transplant

Acute myocardial infarction in cardiac transplant recipients; 1093

An echocardiographic and anatomic description of the donor-recipient atrial anastomosis after orthotopic cardiac transplantation; 109

Association of coronary artery disease in cardiac transplant recipients with cytomegalovirus infection; 359

Exercise capacity during the first year after cardiac transplantation; 642

Influence of beta blockade on exercise capacity and heart rate response after human orthotopic and heterotopic cardiac transplantation; 636

Lovastatin therapy for hypercholesterolemia in cardiac transplant recipients; 631

Myocardial carnitine in end-stage congestive heart failure: 56

Cardiogenic shock

Emergency percutaneous cardiopulmonary bypass support in cardiogenic shock from acute myocardial infarction; 967

Cardiology

Univariate genetic analysis of blood pressure in children (The Medical College of Virginia Twin Study): 1333

Cardiology meetings

Providing heart-healthy alternatives at cardiology meetings: grilled salmon or beef tenderloin? 111

Cardiomegaly, massive
Hypertrophic cardiomyopathy as a cause of
massive cardiomegaly (>1,000 g); 1209

Cardiomyopathy

See also Hypertrophic cardiomyopathy Ability of left ventricular stress-shortening relations, end-systolic stress/volume ratio and indirect indexes to detect severe contractile failure in ischemic or idiopathic

dilated cardiomyopathy; 1338 Correlation between histomorphometric findings on endomyocardial biopsy and clinical findings in idiopathic dilated cardiomyopathy; 504

Histopathologic and electrophysiologic correlations in idiopathic dilated cardiomyopathy and sustained ventricular tachyarrhythmia; 1063

Importance of the left ventricular filling pressure on diastolic filling in idiopathic dilated cardiomyopathy; 61

The morphologic spectrum of dilated cardiomyopathy and its relation to immuneresponse genes; 993

ardiopulmonary bypass

Emergency percutaneous cardiopulmonary bypass support in cardiogenic shock from acute myocardial infarction; 967

Cardiopulmonary bypass support Percutaneous cardiopulmonary bypass support

in high-risk patients undergoing percutaneous transluminal coronary angioplasty; 1258

Cardiovascular screening

Preparticipation echocardiographic screening for cardiovascular disease in a large predominantly black population of collegiate athletes: 1029

Cardioversion

Inmediate improvement in left ventricular function after cardioversion of atrial flutter: 1043

Carnitine

Myocardial carnitine in end-stage congestive heart failure; 56

Carotene

Changes in plasma vitamin levels in the first 48 hours after onset of acute myocardial infarction; 971

Catecholamines

Effect of exercise training in 60- to 69-year-old persons with essential hypertension; 348 Effects of low altitude exposure on 24-hour blood pressure and adrenergic activity; 1379

Nonsustained ventricular tachycardia arising from the right ventricular outflow tract; 594

Catheterization complications

Early hospital discharge after percutaneo transluminal coronary angioplasty; 1270

Catheters, angiographic

Fidelity of micromanometer pressure transduction in closed-end angiographic catheters: 1213

Cerebral arteriovenous

Two-dimensional echocardiography and Doppler findings in cerebral arteriovenous malformation; 252

Cerebrotendinous xanthomatosis

Macroreentrant ventricular tachycardia and coronary artery disease in cerebrotendinous xanthomatosis; 680

Children

Atenolol in children with supraventricular tachycardia; 233

Intermediate-term follow-up results of balloon aortic valvuloplasty in infants and children with special reference to causes of restenosis; 1356

Percutaneous catheter closure of the ductus arteriosus in children and young adults; 218

Chronic obstructive pulmonary disease

Doppler echocardiography and ultrafast cine computed tomography during dynamic exercise in chronic parenchymal pulmonary disease: 528

Reduced exercise capacity of chronic obstructive pulmonary disease patients exercising with noseclip/mouthpiece; 1180

Chronic total coronary occlusion Percutaneous coronary laser angioplasty using quick short bursts of laser thermal energy for

chronic total occlusions; 940

Restenosis after excellent angiographic angioplasty result for chronic total coronary artery occlusion-implications for newer percutaneous revascularization devices; 667

Chronobiology Usefulness of twenty-four-hour blood pressure patterns and response to short-term sodium restriction in normotensive subjects in detecting a predisposition to systemic

arterial hypertension; 604 Cineangiography

In vivo relation between cineangiographic jet width and jet width imaged by color-coded Doppler; 1399 Circadian variation

Influence of beta-adrenergic blockade defined by time series analysis on circadian variation of heart rate and ambulatory myocardial ischemia; 835

Circulatory shock

Hemodynamic effects of high dose naloxone in congestive heart failure; 542

Circumflex coronary artery

Left ventricular dysfunction in acute myocardial infarction due to isolated left circumflex coronary artery stenosis; 440

Clinical epidemiology

A brief self-administered questionnaire to determine functional capacity (The Duke Activity Status Index); 651

Clinical trials

Hemodynamic effects of high dose naloxone in congestive heart failure; 542

Collateral flow

Quantitative assessment of coronary arterial diameter before and after coronary artery bypass grafting; 261

Color-coded Doppler

In vivo relation between cineangiographic jet width and jet width imaged by color-coded Doppler; 1399

Color Doppler echocardiography

A quantitative comparison of transesophageal and epicardial color Doppies echocardiography in the intraoperative assessment of mitral regurgitation; 1168

Detection of diastolic atrioventricular valvular regurgitation by "M-mode" color Doppler

echocardiography; 809 Frequence and significance of aortic valve thickening in older asymptomatic patients and its relation to aortic regurgitation; 1061

Improved sensitivity of color Doppler by SH U 454: 374

Color Doppler flow imaging

Assessment by Doppler color flow mapping of ventricular septal defect after acute myocardial infarction; 668

Color flow Doppler evaluation of cardiac bioprosthetic valves; 1389

Color flow Doppler evaluation of St. Jude Medical prosthetic valves; 1387

Usefulness of color Doppler flow imaging to distinguish ventricular septal defect from acute mitral regurgitation complicating acute myocardial infarction; 697

Commissurotomy

Successful percutaneous transvenous catheter balloon mitral commissurotomy after warfarin therapy and resolution of left atrial thrombus: 126

Complications

Predictors of success in percutaneous transluminal coronary angioplasty of chronic total occlusions; 1264

Computerized measurement Computer-based implementation of the STsegment/heart rate slope; 926

Conduction system disease

Significance of positive or negative thallium-201 scintigraphy in hypertrophic cardiomyopathy; 498

Congenital atrioventricular block Cardiorespiratory response to exercise in

congenital complete atrioventricular block;

Congenital heart disease

Application of flow measurements by magnetic resonance velocity mapping to congenital heart disease: 953

Congestive heart failure

Acute hemodynamic effects of adibendan, a new phosphodiesterase inhibitor, for severe congestive heart failure; 390

A new Doppler method of assessing left ventricular ejection force in chronic congestive heart failure; 81

Attenuation of the pressor response to intravenous furosemide by angiotensin converting enzyme inhibition in congestive heart failure: 1382

Changes in dyspnea-fatigue ratings as indicators of quality of life in the treatment of congestive heart failure; 50

Decreased spontaneous heart rate variability in congestive heart failure; 1162

Effect of milrinone on steady-state digoxin levels in congestive heart failure; 1057

Effect of tricuspid regurgitation on the reliability of the thermodilution cardiac output technique in congestive heart failure; 945

Hemodynamic effects of high dose naloxone in congestive heart failure; 542

Long-term predictors of sudden and low output death in chronic congestive heart failure secondary to coronary artery disease; 1343

Myocardial carnitine in end-stage congestive heart failure: 56

Continous wave Doppler

Noninvasive measurement of cardiac output during surgery using a new continuous-wave Doppler esophageal probe; 793

Contractility

Ability of left ventricular stress-shortening relations, end-systolic stress/volume ratio and indirect indexes to detect severe contractile failure in ischemic or idiopathic dilated cardiomyopathy; 1338

Contrast agent nephrotoxicity

Nephrotoxicity of a nonionic (iopamidol) versus an ionic (diatrizoate) contrast agent in the patient after cardiac transplant with moderate cyclosporine-induced renal insufficiency; 405

Contrast nephropathy

Nephrotoxicity of nonionic contrast media after cardiac angiography; 815

Corneal microdeposits

Correlation of amiodarone dosage, heart rate, QT interval and corneal microdeposits with serum amiodarone and desethylamiodarone concentrations: 1138

Coronary angiography

Use of technetium-99m isonitrile (RP-30A) in assessing left ventricular perfusion and function at rest and during exercise in coronary artery disease, and comparison with coronary arteriography and exercise thallium-201 SPECT imaging; 270

Coronary angioplasty

Comparison by quantitative angiographic assessment of coronary stenoses of one view showing the severest narrowing to two orthogonal views; 462

Early hospital discharge after percutaneous transluminal coronary angioplasty; 1270

Effect of intravenous diltiazem on myocardial ischemia occurring during percutaneous transluminal coronary angioplasty; 1103

Emergency percutaneous cardiopulmonary bypass support in cardiogenic shock from acute myocardial infarction; 967

Percutaneous cardiopulmonary bypass support in high-risk patients undergoing percutaneous transluminal coronary angioplasty; 1258

Predictors of success in percutaneous transluminal coronary angioplasty of chronic total occlusions; 1264

Restenosis after excellent angiographic angioplasty result for chronic total coronary artery occlusion-implications for newer percutaneous revascularization devices; 667

Coronary anomalies

Retroaortic epicardial course of the left circumflex coronary artery and anteroaortic intramyocardial (ventricular septum) course of the left anterior descending coronary artery: an unusual coronary anomaly and a proposed classification based on the number of coronary ostia in the aorta; 828

Coronary arterial fistula

Evaluation of coronary arterial fistula by colorcoded Doppler echocardiography; 689

Coronary arteries

Atherectomy of the left main coronary artery with percutaneous cardiopulmonary bypass support; 114

Coronary artery thermal damage during percutaneous "hot tip" laser-assisted angioplasty; 116

In vivo assessment of a digital angiographic method to measure absolute coronary artery diameters: 131

Left main coronary angioplasty: early and late results of 127 acute and elective procedures; 144

Coronary arteriogram

Soft-tipped coronary artery catheters reduce the frequency of coronary artery dissection; 1199

Coronary artery

Soft-tipped coronary artery catheters reduce the frequency of coronary artery dissection;

Coronary artery bypass grafting

Comparison of exercise test responses before and after either percutaneous transluminal coronary angioplasty or coronary artery bypass grafting; 1039

Upright bicycle exercise echocardiography after coronary artery bypass grafting, 1123

Coronary artery disease

A physiologically based model of creatine kinase-MB release in reperfusion of acute myocardial infarction: 11

Association of coronary artery disease in cardiac transplant recipients with cytomegalovirus infection; 359

Comparative evaluation of coronary stenoses using fluid dynamic equations and standard quantitative coronary arteriography; 6

Comparison of three Bayesian methods to estimate posttest probability in patients undergoing exercise stress testing; 1117

Coronary artery disease in patients 35 years of age or older with valvular aortic stenosis;

Coronary risk associated with age and sex of parental heart disease in the Framingham Study; 555

Effect of intravenous diltiazem on myocardial ischemia occurring during percutaneous transluminal coronary angioplasty; 1103

Effects of high resistance training in coronary artery disease: 866

- Frequency of symptoms suggestive of dynamic coronary artery disease in patients referred for coronary angiography; 1374
- International application of a new probability algorithm for the diagnosis of coronary artery disease; 304
- In vivo assessment of a digital angiographic method to measure absolute coronary artery diameters: 131
- Left main coronary angioplasty: early and late results of 127 acute and elective procedures;
- Magnum wire for balloon recanalization of chronic total coronary occlusions; 148
- Nuclear magnetic resonance imaging of acute myocardial infarction within 24 hours of chest pain onset; 172
- Positron emission tomography using fluorine-18 deoxyglucose in evaluation of coronary artery bypass grafting; 860
- Prognosis after acute myocardial infarction in patients with and without residual anterograde coronary blood flow; 155
- Prognostic significance of silent myocardial ischemia detected by early treadmill exercise after coronary angioplasty; 1
- Prognostic value of atrial pacing and thallium-201 scintigraphy in patients with stable chest pain; 987
- Usefulness of oral dipyridamole digital echocardiography for detecting coronary artery disease; 385
- Usefulness of percutaneous transluminal coronary angioplasty in alleviating silent myocardial ischemia in patients with absent or minimal painful myocardial ischemia; 560
- Coronary artery fistula
 - Acquired coronary artery-left ventricular pseudoaneurysm fistula after myocardial infarction; 824
- **Coronary artery morphology**
 - Angiographic characteristics of the infarctrelated coronary artery in patients with angina pectoris after myocardial infarction; 257
- **Coronary atherosclerosis**
 - Qualitative and quantitative comparison of amounts of narrowing by atherosclerotic plaques in the major epicardial coronary arteries at necropsy in sudden coronary death, transmural acute myocardial infarction, transmural healed myocardial infarction and unstable angina pectoris; 324
- Coronary blood flow
 - Hemodynamic and echocardiographic assessment of the effects of diltiazem during transient occlusion of the left anterior descending coronary artery during percutaneous transluminal coronary angioplasty; 849
- Coronary bypass grafting
 - Positron emission tomography using fluorine-18 deoxyglucose in evaluation of coronary artery bypass grafting; 860
- Quantitative assessment of coronary arterial diameter before and after coronary artery bypass grafting; 261
- Coronary care
 - Risk of adverse outcome in patients admitted to the coronary care unit with suspected unstable angina pectoris; 845
- **Ceronary catheter**
 - Soft-tipped coronary artery catheters reduce the frequency of coronary artery dissection;

- **Coronary catheterization**
 - Transcoronary techniques and cardiac arrhythmias; 534
- **Coronary disease**
- Type A behavior and survival: a follow-up study of 1,467 patients with coronary artery disease: 427
- Coronary dissection
- Early hospital discharge after percutaneous transluminal coronary angioplasty; 1270 Soft-tipped coronary artery catheters reduce the
- Soft-tipped coronary artery catheters reduce the frequency of coronary artery dissection; 1199
- Coronary events, prediction of
 - Limitations of a conventional logistic regression model based on left ventricular ejection fraction in predicting coronary events after myocardial infarction; 702
- Coronary excimer laser angioplasty
 - Initial angiographic results in ablation of atherosclerotic plaque by percutaneous coronary excimer laser angioplasty without subsequent balloon dilatation; 1253
- Coronary flow reserve
 - Maximal coronary vasodilator capacity of orthotopic heart transplants in patients with and without rejection; 513
- **Coronary recanalization**
 - Effect of combined administration of saruplase and single-chain alteplase on coronary recanalization in acute myocardial infarction;
- Coronary resistance reserve
- Maximal coronary vasodilator capacity of orthotopic heart transplants in patients with and without rejection; 513
- Coronary risk factors
 - Comparison of nifedipine, propranolol and isosorbide dinitrate on angiographic progression and regression of coronary arterial narrowings in angina pectoris; 433
- Cerenary sinus blood flow
 - Maximal coronary vasodilator capacity of orthotopic heart transplants in patients with and without rejection; 513
- Coronary stenosis
 - Comparison by quantitative angiographic assessment of coronary stenoses of one view showing the severest narrowing to two orthogonal views; 462
- Cor pulmonale
 - Severe pulmonary hypertension and cor pulmonale in the acquired immunodeficiency syndrome; 1396
- Creatine kinase
- A physiologically based model of creatine kinase-MB release in reperfusion of acute myocardial infarction; 11
- Characteristics associated with early (A3 months) versus late (>3 months to A3 years) mortality after acute myocardial infarction: 315
- **Cutoff** ratio

40 i

- Differential sensitivity of the RV₆:RV₅ voltage ratio by pathogenesis of left ventricular hypertrophy and diagnostic cutpoint; 817
- Cyclosporine-induced
 - hypertension
 Response to dynamic exercise of the
 orthotopically transplanted human heart in
 men immunosuppressed with cyclosporine;

- Cytomegalovirus infection
 - Association of coronary artery disease in cardiac transplant recipients with cytomegalovirus infection; 359
- Defibrillators
 - Reemployment following implantation of the automatic cardioverter defibrillator; 199
- Desethylamiodarone
 - Correlation of amiodarone dosage, heart rate, QT interval and corneal microdeposits with serum amiodarone and desethylamiodarone concentrations: 1138
- Diabetes mellitus
 - Left ventricular diastolic dysfunction evaluated by Doppler echocardiography in patients with diabetes mellitus; 1037
 - Predictive value of quantitative dipyridamulethallium scintigraphy in assessing cardiovascular risk after vascular surgery in diabetes mellitus; 1275
- Diabetic cardiomyopathy
 - Prevalence and signficance of left ventricular filling abnormalities determined by Doppler echocardiography in young type I (insulindependent) diabetic patients; 1010
- Diagnosis
 - A new epidemiologic classification system for interim myocardial infarction from serial electrocardiographic changes; 454
 - Early image acquisition after administration of indium-111 platelets in clinically suspected deep venous thrombosis; 363
- Diastole
 - Mechanism of altered pattern of left ventricular filling with aging in subjects without cardiac disease: 523
- Diastolic function
- Importance of overweight in studies of left ventricular hypertrophy and diastolic function in mild systemic hypertension; 752
- Diastolic mitral regurgitation
- Detection of diastolic atrioventricular valvular regurgitation by "M-mode" color Doppler echocardiography; 809
- Diet
 - Providing heart-healthy alternatives at cardiology meetings: grilled salmon or beef tenderloin? 111
- Diffuse coronary vasospasm
 - Diffuse coronary vasospasm and accelerated atherosclerosis in a transplanted human heart; 825
- Diltiazem
- Comparison of blood pressure response to heat stress in sauna in young hypertensive patients treated with atenolol and diltiazem;
- Effect of intravenous diltiazem on myocardial ischemia occurring during percutaneous transluminal coronary angioplasty; 1103
- Hemodynamic and echocardiographic assessment of the effects of diltiazem during transient occlusion of the left anterior descending coronary artery during percutaneous transluminal coronary angioplasty; 849
- Dimensions of atrial septum
- Natural course of atrial septal aneurysm in children and the potential for spontaneous closure of associated septal defect; 998
- Dipyridamole
 - Comparison of myocardial washout rate of thallium-201 between rest, dipyridamole with and without aminophylline, and exercise states in normal subjects; 1022

SUBJECT INDEX

Maximal coronary vasodilator capacity of orthotopic heart transplants in patients with and without rejection; 513

Predictive value of quantitative dipyridamolethallium scintigraphy in assessing cardiovascular risk after vascular surgery in diabetes mellitus; 1275

Prognostic value of intravenous dipyridamole thallium scintigraphy after an acute myocardial ischemic event; 161

Quantitative comparison of thallium-201 scintigraphy after exercise and dipyridamole in coronary artery disease; 871

Usefulness of oral dipyridamole digital echocardiography for detecting coronary artery disease; 385

Usefulness of the severity and extent of reversible perfusion defects during thalliumdipyridamole imaging for cardiac risk assessment before noncardiac surgery; 276

Dipyridamole-thalllum

Noninvasive cardiac risk stratification of diabetic and nondiabetic uremic renal allograft candidates using dipyridamole-thallium-201 imaging and

radionuclide ventriculography; 1019
Prognostic utility of predischarge dipyridamolethallium imaging compared to predischarge submaximal exercise electrocardiography and maximal exercise thallium imaging after uncomplicated acute myocardial infarction; 1243

Direct angioplasty
Early and late results of coronary angioplasty without antecedent thrombolytic therapy for acute myocardial infarction; 1221

Discrete subaortic stenosis

Correlation of distance from subaortic membrane to base of the right aortic valve cusp and the development of aortic regurgitation in mild discrete subaortic stenosis; 395

Discriminant function

International application of a new probability algorithm for the diagnosis of coronary artery disease; 304

Diuretics

Effects of diuretic therapy and exercise-related arrhythmias in systemic hypertension; 1152

Diurnal variation

Morning increase in the time of onset of sustained ventricular tachycardia; 1204

Doppler echocardiography

See also Echocardiography; Two-dimensional echocardiography

Assessment by Doppler color flow mapping of ventricular septal defect after acute myocardial infarction; 668

Comparison of Doppler indexes of left ventricular diastolic function with simultaneous high fidelity left atrial and ventricular pressures in idiopathic dilated cardiomyopathy; 1173

Differential sensitivity of the RV6:RV5 voltage ratio by pathogenesis of left ventricular hypertrophy and diagnostic cutpoint; 817

Doppler-echocardiographic evaluation of left atrial contribution to left ventricular filling in mitral stenosis at rest and during exercise; Doppler echocardiography and ultrafast cine computed tomography during dynamic exercise in chronic parenchymal pulmonary disease: 528

Effects of left ventricular preload and afterload on ascending aortic blood velocity and acceleration in coronary artery disease; 856 Hemodynamic changes during sickle cell crisis;

1211

Influence of transmitral filling dynamics on continuous-wave Doppler assessment of aortic regurgitation by half-time methods:

Left ventricular diastolic dysfunction evaluated by Doppler echocardiography in patients with diabetes mellitus; 1037

Mechanism of altered pattern of left ventricular filling with aging in subjects without cardiac disease; 523

Prevalence and signficance of left ventricular filling abnormalities determined by Doppler echocardiography in young type I (insulindependent) diabetic patients; 1010

Prospective Doppler echocardiographic evaluation of pulmonary artery diastolic pressure in the medical intensive care unit; 1366

Doppler measurements of aortic blood flow velocity

Doppler measurements of aortic blood flow velocity and acceleration: load-independent indexes of left ventricular performance? 935

Doppler ultrasound

A new Doppler method of assessing left ventricular ejection force in chronic congestive heart failure; 81

Doppler echocardiographic measurement of low velocity motion of the left ventricular posterior wall; 66

Doppler evaluation of homograft valved conduits in children; 354

Noninvasive assessment of peripheral vascular disease by color flow Doppler/twodimensional ultrasound: 247

Two-dimensional echocardiography and Doppler findings in cerebral arteriovenous malformation; 252

Usefulness of the Doppler mean gradient in evaluation of children with aortic valve stenosis and comparison to gradient at catheterization; 756

Doppler velocity and acceleration Effect of blood pressure and afterload on

Doppler echocardiographic measurements of left ventricular systolic function in normal subjects; 905

Doxazosin

Effectiveness of doxazosin in systemic hypertension; 203

Drug toxicity

Usefulness of serial pulmonary function testing as an indicator of amiodarone toxicity; 1322

Dual atrioventricular-node

pathways Role of intravenous isoproterenol in the electrophysiologic induction of atrioventricular node reentrant tachycardia in patients with dual atrioventricular node pathways; 1131

Ductus arteriosus

Doppler echocardiographic assessment of shunting via the ductus arteriosus in newborn infants: 102

Percutaneous catheter closure of the ductus arteriosus in children and young adults; 218

Dyspnea

Changes in dyspnea-fatigue ratings as indicators of quality of life in the treatment of congestive heart failure; 50

Ear densitogram

Noninvasive assessment of central circulatory pressures by analysis of ear densitographic changes during the Valsalva maneuver; 787

Early discharge

Early hospital discharge after percutaneous transluminal coronary angioplasty; 1270 Echocardiographic contrast agent

Improved sensitivity of color Doppler by SH U 454: 374

Echocardiography

See also Doppler echocardiography; Two-dimensional echocardiography

An echocardiographic and anatomic description of the donor-recipient atrial anastomosis after orthotopic cardiac transplantation; 109

A new Doppler method of assessing left ventricular ejection force in chronic congestive heart failure; 81

Correlation of distance from subaortic membrane to base of the right aortic valve cusp and the development of aortic regurgitation in mild discrete subaortic stenosis; 395

Doppler echocardiographic assessment of shunting via the ductus arteriosus in newborn infants; 102

Doppler echocardiographic measurement of low velocity motion of the left ventricular posterior wall; 66

Doppler evaluation of homograft valved conduits in children; 354

Echocardiographic detection of pericardiocentesis-induced subepicardial and intramyocardial hematoma: 820

Effects of atenolol on left ventricular hypertrophy and early left ventricular function in essential hypertension; 1157 Evaluation of coronary arterial fistula by color-

coded Doppler echocardiography; 689 Impact of age on echocardiographic left

ventricular mass in a healthy population (The Framingham Study); 1066

Importance of overweight in studies of left ventricular hypertrophy and diastolic function in mild systemic hypertension; 752

Influence of thrombolytic treatment followed by full dose anticoagulation on the frequency of left ventricular thrombi in acute myocardial infarction; 588

Mechanism of altered pattern of left ventricular filling with aging in subjects without cardiac disease; 523

Natural course of atrial septal aneurysm in children and the potential for spontaneous closure of associated septal defect; 998

Noninvasive evaluation of cardiac structure and function in alpinists; 676 Prenatal diagnosis and circulatory

characteristics in tetralogy of Fallot with absent pulmonary valve; 547

Preparticipation echocardiographic screening for cardiovascular disease in a large, predominantly black population of collegiate athletes; 1029

Quantitation and significance of systolic mitral leaflet displacement in mitral valve prolapse;

- Two-dimensional echocardiographic aortic root dimensions in normal children and adults; 507
- Ultrasonic debridement of the aortic valve with six-month echocardiographic follow-up; 1206 Upright bicycle exercise echocardiography after
- coronary artery bypass grafting; 1123 Usefulness of oral dipyridamole digital echocardiography for detecting coronary
- artery disease; 385 Utility of precordial, epicardial and transesophageal two-dimensional echocardiography in the detection of
- intracardiac foreign bodies; 406
 Echocardiography, abdominal and transesophageal
- Application of abdominal and transesophageal echocardiography as a guide for insertion of intraaortic balloon pump in aortic dissection; 1082
- Education
 - Effect of a media campaign on delay times and ambulance use in suspected acute myocardial infarction; 90
- **Ejection fraction**
- Relation between ventricular function and antiarrhythmic responses to sotalol; 943
- **Elderly patients**
 - Correlation of ischemic ST-segment depression on the resting electrocardiogram with new cardiac events in 1,106 patients over 62 years of age; 232
- **Electrical cardioversion**
 - Efficacy and safety of flecainide acetate in the maintenance of sinus rhythm after electrical cardioversion of chronic atrial fibrillation or atrial flutter: 1317
- Electrocardiogram
 - A new epidemiologic classification system for interim myocardial infarction from serial electrocardiographic changes; 454
 - Clinical characteristics and outcome of acute myocardial infarction in patients with initially normal or nonspecific electrocardiograms (a report from the Multicenter Chest Pain Study); 1087
 - Physiologic relation between cardiac cycle and QT duration in healthy volunteers; 481
- Electrocardiogram/defibrillator pad
 - Electrode pad size, transthoracic impedance and success of external ventricular defibrillation; 741
- Electrocardiography
 - Differentiation between late potentials of right ventricular and of left ventricular origin; 37
 - Differentiation of the origin of wide QRS complexes by the net amplitude of the QRS in lead V₆; 1053
- Effect of aspirin on myocardial ischemia; 387 Intraventricular conduction delay in acute right ventricular ischemia: 94
- Long-term variability of angina pectoris and electrocardiographic signs of ischemia in syndrome X: 139
- Role of bandpass filters in optimizing the value of the signal-averaged electrocardiogram as a predictor of the results of programmed stimulation; 16
- Electrophysiology
 - Effect of selective intracoronary antiarrhythmic drug administration in sustained ventricular tachycardia; 475

- High grade entrance and exit block in an area of healed myocardial infarction associated with ventricular tachycardia with successful laser photoablation of the anatomic substrate; 122
- Histopathologic and electrophysiologic correlations in idiopathic dilated cardiomyopathy and sustained ventricular tachyarrhythmia: 1063
- Reversal of electrophysiologic effects of flecainide on the accessory pathway by isoproterenol in the Wolff-Parkinson-White syndrome; 194
- Emboli, cloth
 - Extensive multifocal myocardial infarcts from cloth emboli after replacement of mitral and aortic valves with cloth-covered, caged-ball prostheses: 410
- **Emergency room**
- Clinical characteristics and outcome of acute myocardial infarction in patients with initially normal or nonspecific electrocardiograms (a report from the Multicenter Chest Pain Study); 1087
- **Endomyocardial biopsy**
 - Correlation between histomorphometric findings on endomyocardial biopsy and clinical findings in idiopathic dilated cardiomyopathy; 504
 - The morphologic spectrum of dilated cardiomyopathy and its relation to immuneresponse genes; 993
- Endorphins
 - Hemodynamic effects of high dose naloxone incongestive heart failure; 542
- Endothelin
- Intracoronary endothelin induces myocardial ischemia by small vessel constriction in the dog; 956
- **Epidemiologic studies**
 - Impact of age on echocardiographic left ventricular mass in a healthy population (The Framingham Study); 1066
- Ergonovine provocation
- Quantitative arteriographic responses to ergonovine provocation in subjects with atypical chest pain; 778
- **Esophageal Doppler probe**
 - Noninvasive measurement of cardiac output during surgery using a new continuous-wave Doppler esophageal probe; 793
- **Esophageal pill**
- Usefulness of esophageal pill electrode atrial pacing with quantitative two-dimensional echocardiography for diagnosing coronary artery disease; 730
- Estrogen replacement therapy
- Effect of estrogen replacement therapy on the ST-segment response to postural and hyperventilation stimuli; 1076
- Exercise
 - Comparison of myocardial washout rate of thallium-201 between rest, dipyridamole with and without aminophylline, and exercise states in normal subjects; 1022
 - Comparison of the effects of pindolol and propranolol on exercise performance in young men with systemic hypertension; 343
 - Doppler echocardiography and ultrafast cine computed tomography during dynamic exercise in chronic parenchymal pulmonary
 - Effect of exercise and cavity size on right ventricular function in morbid obesity; 1361

- Effects of diuretic therapy and exercise-related arrhythmias in systemic hypertension; 1152
- Evaluation of a microprocessor-controlled sphygmomanometer for recording blood pressure during exercise; 806
- Exercise capacity during the first year after cardiac transplantation; 642
- Physiologic relation between cardiac cycle and QT duration in healthy volunteers; 481
- Prevalence of multivavular regurgitation in athletes; 209
- Quantitative comparison of thallium-201 scintigraphy after exercise and dipyridamole in coronary artery disease; 871
- Reduced exercise capacity of chronic obstructive pulmonary disease patients exercising with noseclip/mouthpiece; 1180
- **Exercise capacity**
 - Influence of beta blockade on exercise capacity and heart rate response after human orthotopic and heterotopic cardiac transplantation; 636
- Exercise electrocardiogram
 - Prognosis in patients with a strongly positive exercise electrocardiogram; 1284
- Exercise electrocardiography
- A simplified approach for evaluating multiple test outcomes and multiple disease states in relation to the exercise thallium-201 stress test in suspected coronary artery disease;
- Exercise thallium-201 scintigraphy and prognosis in typical angina pectoris and negative exercise electrocardiography; 282
- **Exercise stress testing**
 - Comparative effects of theophylline and isosorbide dinitrate on exercise capacity in stable angina pectoris, and their mechanisms of action; 1098
- Prognosis in patients with a strongly positive exercise electrocardiogram; 1284
- Response to dynamic exercise of the orthotopically transplanted human heart in men immunosuppressed with cyclosporine;
- Exercise testing
 - An office-based exercise protocol for predicting chronotropic response of activity-triggered, rate-variable pacemakers; 27
 - Cardiorespiratory response to exercise in congenital complete atrioventricular block;
 - Comparison of cardiovascular adjustments to exercise in adolescents 8 to 15 years of age after correction of tetralogy of Fallot, ventricular septal defect or atrial septal defect; 213
 - Comparison of exercise test responses before and after either percutaneous transluminal coronary angioplasty or coronary artery bypass grafting; 1039
 - Comparison of three Bayesian methods to estimate posttest probability in patients undergoing exercise stress testing; 1117
 - Disparate hemodynamic and sympathoadrenergic responses to isometric and mental stress in essential hypertension; 42
 - Early detection of myocardial ischemia by myocardial free fatty acid extraction in patients with exercise-induced angina pectoris; 180

Effects of diltiazem alone or with isosorbide dinitrate or with atenolol both acutely and chronically for stable angina pectoris; 717

Nonsustained ventricular tachycardia arising from the right ventricular outflow tract; 594 Prevalence of silent myocardial ischemia in

survivors of cardiac arrest; 591 Prognostic significance of silent myocardial ischemia detected by early treadmill exercise

after coronary angioplasty; 1 Prognostic utility of predischarge dipyridamolethallium imaging compared to predischarge submaximal exercise electrocardiography and maximal exercise thallium imaging after uncomplicated acute myocardial infarction;

Upright bicycle exercise echocardiography after coronary artery bypass grafting; 1123 Usefulness of sustained-release diltiazem for

stable angina pectoris; 1249 Usefulness of thallium-201 scintigraphy in predicting the development of angina pectoris in hypertensive patients with left ventricular hypertrophy; 45

Use of technetium-99m isonitrile (RP-30A) in assessing left ventricular perfusion and function at rest and during exercise in coronary artery disease, and comparison with coronary arteriography and exercise thallium-201 SPECT imaging; 270

Utility of lead VAR in exercise testing for detection of coronary artery disease; 938 Weight carrying versus handgrip exercise testing in men with coronary artery disease; 736

Exercise thallium-201 imaging A simplified approach for evaluating multiple test outcomes and multiple disease states in relation to the exercise thallium-201 stress test in suspected coronary artery disease;

Exercise training

Effect of exercise training in 60- to 69-year-old persons with essential hypertension; 348

Exertional angina

Painful versus silent myocardial ischemia during leg and arm exercise testing in stable angina pectoris; 300

Extracardiac conduits

Doppler evaluation of homograft valved conduits in children; 354

Familial sudden death syndrome Association of bidirectional ventricular tachycardia with familial sudden death

syndrome; 1078 **Family history**

Coronary risk associated with age and sex of parental heart disease in the Framingham Study: 555

Fatigue

Changes in dyspnea-fatigue ratings az indicatora of quality of life in the treatment of congestive heart failure; 50

Fatty acid extraction

Early detection of myocardial ischemia by myocardial free fatty acid extraction in patients with exercise-induced angina pectoris; 180

Femoropopliteal circulation

Transluminal laser angioplasty of the femoropopliteal circulation by use of a percutaneous popliteal approach; 106

Fish oil

Usefulness of fish oil supplements in preventing clinical evidence of restenosis after percutaneous transluminal coronary angioplasty; 294

Flecainide

Efficacy and safety of flecainide acetate in the maintenance of sinus rhythm after electrical cardioversion of chronic atrial fibrillation or atrial flutter; 1317

Reversal of electrophysiologic effects of flecainide on the accessory pathway by isoproterenol in the Wolff-Parkinson-White syndrome; 194

Flow measurement

Application of flow measurements by magnetic resonance velocity mapping to congenital heart disease; 953

Fluid dynamic equations

Comparative evaluation of coronary stenoses using fluid dynamic equations and standard quantitative coronary arteriography; 6

Fluorine-18 deoxyglucose

Positron emission tomography using fluorine-18 deoxyglucose in evaluation of coronary artery bypass grafting; 860

Fontan operation

Predictors of rhythm disturbances and subsequent morbidity after the Fontan operation: 762

From the Editor

Atherosclerotic risk factors—are there ten or is there only one? 552

Clogged arteries and clogged roads; 959 Lipid-lowering therapy after an atherosclerotic event; 693

Living with a congenitally bicuspid aortic valve; 1408

The echocardiographic diseases; 1084

Functional status

A brief self-administered questionnaire to determine functional capacity (The Duke Activity Status Index); 651

Furosemide

Attenuation of the pressor response to intravenous furosemide by angiotensin converting enzyme inhibition in congestive heart failure: 1382

Generic substitution

Generic substitution of antiarrhythmic drugs; 1371

Genetics

Coronary risk associated with age and sex of parental heart disease in the Framingham Study; 555

Growth rate of left atrial myxoma Growth rate of left atrial myxoma; 1075 **Healed myocardial infarction**

Qualitative and quantitative comparison of amounts of narrowing by atherosclerotic plaques in the major epicardial coronary arteries at necropsy in sudden coronary death, transmural acute myocardial infarction, transmural healed myocardial infarction and unstable angina pectoris; 324

Heart catheterization

Noninvasive measurement of left ventricular filling pressures by means of transmitral pulsed Doppler ultrasound; 655

Meart conduction system

Random and nonrandom behavior of symptomatic paroxysmal atrial fibrillation; 339

Heart failure

Effect of tricuspid regurgitation on the reliability of the thermodilution cardiac output technique in congestive heart failure;

Hyperglycemia and prognosis of acute myocardial infarction in patients without diabetes mellitus; 885

Inefficacy of daily single bolus dose atrial natriuretic factor in chronic congestive heart failure: 948

Relation between plasma norepinephrine and response to medical therapy in men with congestive heart failure secondary to coronary artery disease or idiopathic dilated cardiomyopathy; 609

Heart murmurs

Continuous spectral analysis of heart murmurs for evaluating stenotic cardiac lesions; 625

Heart rate

Decreased spontaneous heart rate variability in congestive heart failure; 1162

Influence of beta-adrenergic blockade defined by time series analysis on circadian variation of heart rate and ambulatory myocardial ischemia: 835

Influence of beta blockade on exercise capacity and heart rate response after human orthotopic and heterotopic cardiac transplantation; 636

Physiologic relation between cardiac cycle and QT duration in healthy volunteers; 481 Univariate genetic analysis of blood pressure in

children (The Medical College of Virginia Twin Study); 1333

Heart rejection

Maximal coronary vasodilator capacity of orthotopic heart transplants in patients with and without rejection; 513

Heat stress

Comparison of blood pressure response to heat stress in sauna in young hypertensive patients treated with atenolol and diltiazem;

Hematocrit changes after angioplasty

Hematocrit changes after uncomplicated percutaneous transluminal coronary angioplasty; 940

Hemodynamics

Disparate hemodynamic and sympathoadrenergic responses to isometric and mental stress in essential hypertension;

Effect of exercise training in 60- to 69-year-old persons with essential hypertension; 348 Hemodynamic changes during sickle cell crisis;

Hemoglobin-oxygen affinity

Oxygen delivery, oxygen consumption and hemoglobin-oxygen affinity in acute myocardial infarction; 977

Hepatic function

Long-term effects of amiodarone on hepatic function; 95

Heritability

Univariate genetic analysis of blood pressure in children (The Medical College of Virginia Twin Study); 1333

High density lipoprotein cholesterol

Effect of a modified, well-tolerated niacin regimen on serum total cholesterol, high density lipoprotein cholesterol and the cholesterol to high density lipoprotein ratio; 725

HLA class I and II polymorphisms

The morphologic spectrum of dilated cardiomyopathy and its relation to immuneresponse genes; 993

Holter monitoring

See also Ambulatory monitoring Decreased spontaneous heart rate variability in congestive heart failure; 1162

Holter recordings

Comparison of time- and frequency domainbased measures of cardiac parasympathetic activity in Holter recordings after myocardial infarction; 536

Homeostatic responses

Abrupt homeostatic responses to transient intracardiac occlusion during balloon valvuloplasty; 491

Homograft valve

Doppler evaluation of homograft valved conduits in children; 354

Human dilated cardiomyopathy Localization of a "postreceptor" defect in

human dilated cardiomyopathy; 812 **Human orthotopic transplantation**

Response to dynamic exercise of the

orthotopically transplanted human heart in men immunosuppressed with cyclosporine;

Hypercholesterolemia

Lovastatin therapy for hypercholesterolemia in cardiac transplant recipients; 631

Hyperglycemia

Hyperglycemia and prognosis of acute myocardial infarction in patients without diabetes mellitus; 885

Hypertension

See also Blood pressure; Systemic hypertension Comparison of blood pressure response to heat stress in sauna in young hypertensive patients treated with atenolol and diltiazem;

Disparate hemodynamic and sympathoadrenergic responses to isometric and mental stress in essential hypertension;

Effect of exercise training in 60- to 69-year-old persons with essential hypertension; 348 Effects of atenolol on left ventricular hypertrophy and early left ventricular

function in essential hypertension; 1157 Effects of diuretic therapy and exercise-related

arrhythmias in systemic hypertension; 1152 Effects of low altitude exposure on 24-hour blood pressure and adrenergic activity; 1379

Importance of overweight in studies of left ventricular hypertrophy and diastolic function in mild systemic hypertension; 752

Usefulness of thallium-201 scintigraphy in predicting the development of angina pectoris in hypertensive patients with left ventricular hypertrophy; 45

Usefulness of twenty-four-hour blood pressure patterns and response to short-term sodium restriction in normotensive subjects in detecting a predisposition to systemic arterial hypertension; 604

Hypertrophic cardiomyopathy

See also Cardiomyopathy

Hypertrophic cardiomyopathy as a cause of massive cardiomegaly (>1,000 g); 1209 Significance of positive or negative thallium-201 scintigraphy in hypertrophic cardiomyopathy; 498

Hypertrophy

Effects of atenolol on left ventricular hypertrophy and early left ventricular function in essential hypertension; 1157

Hypotension

Significance of nitroglycerin-induced hypotension with inferior wall acute myocardial infarction; 311

Idiopathic dilated cardiomyopathy

Comparison of Doppler indexes of left ventricular diastolic function with simultaneous high fidelity left atrial and ventricular pressures in idiopathic dilated cardiomyopathy; 1173

Idiopathic paroxysmal ventricular tachycardia

Surgical correction of idiopathic paroxysmal ventricular tachycardia possibly related to left ventricular false tendon: 1217

Indium-111

Predictive value of indium-111 antimyosin uptake for improvement of left ventricular wall motion after thrombolysis in acute myocardial infarction; 167

Indium-111 imaging

Indium-111 leukocyte scintigraphic detection of mitral valve vegetations in active bacterial endocarditis; 1080

Inefficacy

Inefficacy of daily single bolus dose atrial natriuretic factor in chronic congestive heart failure: 948

Infants

Doppler echocardiographic assessment of shunting via the ductus arteriosus in newborn infants; 102

Transient atrioventricular block resulting from left ventricular angiography in infants with ventricular septal defect; 128

Infarct angioplasty

Early and late results of coronary angioplasty without antecedent thrombolytic therapy for acute myocardial infarction; 1221

Infarct-artery patency
Correlation of baseline plasminogen activator inhibitor activity with patency of the infarct artery after thrombolytic therapy in acute myocardial infarction; 1231

Infarct expansion

Late ventricular dilatation in survivors of acute myocardial infarction; 961

Inheritance

Coronary risk associated with age and sex of parental heart disease in the Framingham Study: 555

Intermittent dosage

Superior antiplatelet action of alternate day pulsed dosing versus split dose administration of aspirin; 1185

Internal patch electrodes

Adverse effects of permanent cardiac internal defibrillator patches on external defibrillation: 1144

Interstitial fibrosis

Severe pulmonary hypertension and cor pulmonale in the acquired immunodeficiency syndrome; 1396

Interstitial lung disease

Doppler echocardiography and ultrafast cine computed tomography during dynamic exercise in chronic parenchymal pulmonary disease; 528

Severe pulmonary hypertension and cor pulmonale in the acquired immunodeficiency syndrome; 1396

Interval therapy in nitrate

telerance

Interval therapy to avoid nitrate tolerance: paradise regained? 931

Intraabdominal fat

Correlation of intraabdominal fat accumulation and left ventricular performance in obesity;

Intrasortic balloon pump

Application of abdominal and transesophageal echocardiography as a guide for insertion of intraaortic balloon pump in aortic dissection;

Safety of intraaortic balloon counterpulsation in patients with acute myocardial infarction receiving streptokinase intravenously: 937

Intracardiac foreign bodies

Utility of precordial, epicardial and transesophageal two-dimensional echocardiography in the detection of intracardiac foreign bodies; 406

Intraclass correlation analysis

Noninvasive measurement of left ventricular filling pressures by means of transmitral pulsed Doppler ultrasound; 655

Intracoronary

Intracoronary endothelin induces myocardial ischemia by small vessel constriction in the dog; 956

Intramyocardial hematoma

Echocardiographic detection of pericardiocentesis-induced subepicardial and intramyocardial hematoma; 820

Intraoperative echocardiography

A quantitative comparison of transesophageal and epicardial color Doppler echocardiography in the intraoperative assessment of mitral regurgitation; 1168

Diagnostic role of intraoperative epicardial echocardiography following complications of mitral valve replacement with the Bjork-Shiley prosthetic valve; 1402

Intravenous drug abuse

Severe pulmonary hypertension and cor pulmonale in the acquired immunodeficiency syndrome; 1396

Intravenous thrombolysis

Impact of late coronary artery reperfusion on left ventricular function one month after acute myocardial infarction (results from the ISAM study); 878

Intrinsic sympathomimetic activity

Comparison of the effects of pindolol and propranolol on exercise performance in young men with systemic hypertension; 343

Ischemia

See also Myocardial ischemia Comparison of atenolol and nifedipine in chronic stable angina pectoris; 186

Intraventricular conduction delay in acute right ventricular ischemia; 94

Long-term variability of angina pectoris and electrocardiographic signs of ischemia in syndrome X; 139

Prevalence of silent myocardial ischemia in survivors of cardiac arrest; 591

Ischemia after infarction

Importance of early recurrent ischemia on oneyear survival after non-Q-wave acute myocardial infarction; 799

Ischemia at rest

Long-term prognosis of transient acute myocardial ischemia at rest; 889

Ischemic heart disease

Clinical correlates and prognostic significance of type A behavior and silent myocardial ischemia on the treadmill; 1280 Effect of aspirin on myocardial ischemia; 387

Effect of aspirin on myocardial ischemia; 387
Prognosis in patients with a strongly positive
exercise electrocardiogram; 1284

Isometric exercise

Weight carrying versus handgrip exercise testing in men with coronary artery disease; 736

Isoproterenol

Physiologic relation between cardiac cycle and QT duration in healthy volunteers; 481 Reversal of electrophysiologic effects of

Reversal of electrophysiologic effects of flecainide on the accessory pathway by isoproterenol in the Wolff-Parkinson-White syndrome: 194

Role of intravenous isoproterenol in the electrophysiologic induction of atrioventricular node reentrant tachycardia in patients with dual atrioventricular node pathways; 1131

Isosorbide-5-mononitrate

Sustained effect of and lack of development of tolerance to controlled-release isosorbide-5mononitrate in chronic stable angina pectoris; 569

Kussmaul's sign

Mechanism underlying Kussmaul's sign in chronic constrictive pericarditis; 1069

Labor

Increases in atrial natriuretic peptide after delivery and in the puerperium; 674

Laser ablation

Argon laser ablation of malignant ventricular tachycardia associated with coronary artery disease; 1298

Laser angioplasty

Coronary artery thermal damage during percutaneous "hot tip" laser-assisted angioplasty; 116

Percutaneous coronary laser angioplasty using quick short bursts of laser thermal energy for chronic total occlusions; 940

Transluminal laser angioplasty of the femoropopliteal circulation by use of a percutaneous popliteal approach; 106

Late potentials

Differentiation between late potentials of right ventricular and of left ventricular origin; 37 Role of bandpass filters in optimizing the value of the signal-averaged electrocardiogram as a

of the signal-averaged electrocardiogram as a predictor of the results of programmed stimulation; 16

Late reperfusion

Impact of late coronary artery reperfusion on left ventricular function one month after acute myocardial infarction (results from the ISAM study); 878

Lead VAR

Utility of lead V₄R in exercise testing for detection of coronary artery disease; 938

Left anterior descending artery occlusion

Effects of occlusion of the left anterior descending coronary artery during angioplasty on right-sided cardiac pressures and electrocardiographic changes; 577 Left atrial myxoma

Growth rate of left atrial myxoma; 1075

Left atrial vegetations
Echocardiographic detection and clinical significance of left atrial vegetations in active infective endocarditis; 950

Left bundle branch block

ST-segment changes during transmural myocardial ischemia in chronic left bundle branch block; 1216

Left internal mammary artery graft

Spontaneous reversible spasm in an internal mammary artery graft causing acute myocardial infarction; 822

Left ventricular diastolic dysfunction

Left ventricular diastolic dysfunction evaluated by Doppler echocardiography in patients with diabetes mellitus; 1037

Left ventricular ejection fraction

Limitations of a conventional logistic regression model based on left ventricular ejection fraction in predicting coronary events after myocardial infarction; 702

Left ventricular end-diastolic pressure

Noninvasive assessment of central circulatory pressures by analysis of ear densitographic changes during the Valsalva maneuver; 787 Noninvasive measurement of left ventricular

filling pressures by means of transmitral pulsed Doppler ultrasound; 655

Left ventricular false tendon

Surgical correction of idiopathic paroxysmal ventricular tachycardia possibly related to left ventricular false tendon; 1217

Left ventricular filling

Importance of the left ventricular filling pressure on diastolic filling in idiopathic dilated cardiomyopathy; 61

Influence of transmitral filling dynamics on continuous-wave Doppler assessment of aortic regurgitation by half-time methods; 614

Noninvasive measurement of left ventricular filling pressures by means of transmitral pulsed Doppler ultrasound; 655

Prevalence and signficance of left ventricular filling abnormalities determined by Doppler echocardiography in young type I (insulin-dependent) diabetic patients; 1010

Left ventricular function

A new Doppler method of assessing left ventricular ejection force in chronic congestive heart failure; 81

Characteristics associated with early (≤3 months) versus late (>3 months to ≤3 years) mortality after acute myocardial infarction; 315

Immediate improvement in left ventricular function after cardioversion of atrial flutter;

Impact of late coronary artery reperfusion on left ventricular function one month after acute myocardial infarction (results from the ISAM study): 878

Influence of temporal smoothing on quantitation of left ventricular function by gated blood pool scintigraphy; 921

Late ventricular dilatation in survivors of acute myocardial infarction; 961

Left ventricular dysfunction in acute myocardial infarction due to isolated left circumflex coronary artery stenosis; 440 Left ventricular intrinsic contractility in pure rheumatic mitral stenosis; 240

Nuclear magnetic resonance imaging of acute myocardial infarction within 24 hours of chest pain onset; 172

Left ventricular hypertrophy

Role of anemia in the pathogenesis of left ventricular hypertrophy in end-stage renal disease; 222

Usefulness of thallium-201 scintigraphy in predicting the development of angina pectoris in hypertensive patients with left ventricular hypertrophy; 45

Left ventricular mass

Impact of age on echocardiographic left ventricular mass in a healthy population (The Framingham Study); 1066

Left ventricular performance

Correlation of intraabdominal fat accumulation and left ventricular performance in obesity; 369

Left ventricular posterior wall

Doppler echocardiographic measurement of low velocity motion of the left ventricular posterior wall: 66

Left ventricular pseudoaneurysm

Acquired coronary artery-left ventricular pseudoaneurysm fistula after myocardial infarction; 824

Left ventricular structure and function

Left ventricular structure and function in professional basketball players; 1072

Left ventricular thrombi

Diagnosis of left ventricular thrombi by magnetic resonance imaging and comparison with angiocardiography, computed tomography and echocardiography; 1195

Influence of thrombolytic treatment followed by full dose anticoagulation on the frequency of left ventricular thrombi in acute myocardial infarction; 588

Letters to the Editor

Atrial transport function after conversion of atrial fibrillation to sinus rhythm; 1085 Blockpnea as an angina equivalent; 834 Cardiac denervation and long QT interval; 696 Coronary morphology in unstable angina; 256 Denervation of the heart in congenital long QT and deafness; 424 Diltiazem and left ventricular mass regression;

Erratum; 1085

Mortality for women after acute myocardial infarction; 256

Nouns versus adjectives in accounting for discordance; 833

On the identity of "X" in so-called syndrome X; 425

Pulmonary extraction of atrial natriuretic factor in humans: 834

Rapid enzyme measurements in patients with suspected acute myocardial infarction; 834 Standard electrocardiographic extremity leads;

696 Surgery for expected ventricular tachycardia; 832

Treadmill exercise testing versus Holter monitoring for detecting myocardial ischemia; 426

Lipoproteins

Effect of weight loss on coagulation factors VIi and X; 519

Logistic regression models

Limitations of a conventional logistic regression model based on left ventricular ejection fraction in predicting coronary events after myocardial infarction: 702

Lovastatin

Lovastatin therapy for hypercholesterolemia in cardiac transplant recipients; 631

Low dose aspirin

Superior antiplatelet action of alternate day pulsed dosing versus split dose administration of aspirin; 1185

Low dose intravenous nitroglycerin

Tolerance with low dose intravenous nitroglycerin therapy in acute myocardial infarction: 581

Macroreentrant ventricular tachycardia

Macroreentrant ventricular tachycardia and coronary artery disease in cerebrotendinous xanthomatosis; 680

Magnesium

Magnesium sulfate therapy for sustained monomorphic ventricular tachycardia; 1202

Magnetic resonance imaging

Application of flow measurements by magnetic resonance velocity mapping to congenital heart disease; 953

Diagnosis of left ventricular thrombi by magnetic resonance imaging and comparison with angiocardiography, computed tomography and echocardiography: 1195

Nuclear magnetic resonance imaging of acute myocardial infarction within 24 hours of chest pain onset; 172

Usefulness of nuclear magnetic resonance imaging for evaluation of pericardial effusions, and comparison with twodimensional echocardiography; 1004

Magnum wire

Magnum wire for balloon recanalization of chronic total coronary occlusions; 148

Mapping

Differentiation between late potentials of right ventricular and of left ventricular origin; 37

Marfan syndrome

Two-dimensional echocardiographic aortic root dimensions in normal children and adults;

Maturation and S₃

Mechanism of disappearance of S₃ with maturation; 1394

Maximum negative potential

Prognostic significance of ST potentials determined by body surface mapping in inferior wal! acute myocardial infarction; 319

Mean gradient

Usefulness of the Doppler mean gradient in evaluation of children with aortic valve stenosis and comparison to gradient at catheterization; 756

Measurement of jet area

In vivo relation between cineangiographic jet width and jet width imaged by color-coded Doppler: 1399

Mechanism of \$3 disappearance

Mechanism of disappearance of S3 with maturation; 1394

Mental stress

Disparate hemodynamic and sympathoadrenergic responses to isometric and mental stress in essential hypertension; Metabolic rate meter

Limitations of the metabolic rate meter for measuring oxygen consumption and cardiac output: 783

Methodology

A comparison of amplitude-modulated and frequency-modulated ambulatory monitoring systems: 76

Doppler echocardiographic measurement of low velocity motion of the left ventricular posterior wall; 66

Micromanometer-tipped catheters

Fidelity of micromanometer pressure transduction in closed-end angiographic catheters: 1213

Milrinone

Effect of milrinone on steady-state digoxin levels in congestive heart failure; 1057

Mitral and aortic stenosis

Combined percutaneous mitral and aortic balloon valvuloplasty; 620

Mitral lipoma

Mitral valve replacement for mitral lipoma associated with severe obesity; 1405

Mitral regurgitation

A quantitative comparison of transesophageal and epicardial color Doppler echocardiography in the intraoperative assessment of mitral regurgitation; 1168 Importance of the left ventricular filling pressure on diastolic filling in idiopathic

dilated cardiomyopathy; 61 Mitral stenosis

Comparison of results of percutaneous balloon mitral valvotomy using consecutive single (25 mm) and double (25 mm and 12 mm) balloon techniques; 1385

Doppler-echocardiographic evaluation of left atrial contribution to left ventricular filling in mitral stenosis at rest and during exercise;

Left ventricular intrinsic contractility in pure rheumatic mitral stenosis: 240

Mitral valve prolapse

Quantitation and significance of systolic mitral leaflet displacement in mitral valve prolapse;

Scanning electron microscopy of operatively excised severely regurgitant floppy mitral valves: 392

Mitral valve replacement

Mitral valve replacement for mitral lipoma associated with severe obesity; 1405

Mitral valve vegetations

Indium-111 leukocyte scintigraphic detection of mitral valve vegetations in active bacterial endocarditis; 1080

Modes of death in opiate addicts Modes of death and types of cardiac diseases in

opiate addicts: analysis of 168 necropsy cases; 909

Monitoring

Usefulness of twenty-four-hour blood pressure patterns and response to short-term sodium restriction in normotensive subjects in detecting a predisposition to systemic arterial hypertension; 604

Natural history of potentially lethal ventricular arrhythmias in patients treated with long-term antiarrhythmic drug therapy; 1289

Morphometry Correlation between histomorphometric findings on endomyocardial biopsy and clinical findings in idiopathic dilated

cardiomyopathy; 504 Multiple foci of nontransmural myocardial infarction

Acute myocardial infarction in cardiac transplant recipients; 1093

Multivariate analysis

International application of a new probability algorithm for the diagnosis of coronary artery disease; 304

Noninvasive assessment of central circulatory pressures by analysis of ear densitographic changes during the Valsalva maneuver; 787

Mural thrombus

Decision analysis concerning the application of echocardiography to the diagnosis and treatment of mural thrombi after anterior wall acute myocardial infarction; 708

Myocardial dysfunction

Diagnostic role of intraoperative epicardial echocardiography following complications of mitral valve replacement with the Bjork-Shiley prosthetic valve; 1402

Myocardial infarction

See also Acute myocardial infarction A new epidemiologic classification system for interim myocardial infarction from serial

electrocardiographic changes; 454
Assessment by Doppler color flow mapping of ventricular septal defect after acute myocardial infarction; 668

Changes in plasma vitamin levels in the first 48 hours after onset of acute myocardial infarction; 971

Characteristics associated with early (A3 months) versus late (>3 months to A3 years) mortality after acute myocardial infarction: 315

Correlation of baseline plasminogen activator inhibitor activity with patency of the infarct artery after thrombolytic therapy in acute myocardial infarction; 1231

Decision analysis concerning the application of echocardiography to the diagnosis and treatment of mural thrombi after anterior wall acute myocardial infarction; 708

Diagnosis of left ventricular thrombi by magnetic resonance imaging and comparison with angiocardiography, computed tomography and echocardiography; 1195 Hyperglycemia and prognosis of acute

myocardial infarction in patients without diabetes mellitus; 885

Late ventricular dilatation in survivors of acute myocardial infarction; 961

Left ventricular dysfunction in acute myocardial infarction due to isolated left circumflex coronary artery stenosis; 440

Limitations of a conventional logistic regression model based on left ventricular ejection fraction in predicting coronary events after myocardial infarction; 702

Prognostic utility of predischarge dipyridamolethallium imaging compared to predischarge submaximal exercise electrocardiography and maximal exercise thallium imaging after uncomplicated acute myocardial infarction;

Safety of intraaortic balloon counterpulsation in patients with acute myocardial infarction receiving streptokinase intravenously; 937

SUBJECT INDEX

Urokinase plus heparin versus aspirin in unstable angina and non-Q-wave myocardial infarction; 840

Usefulness of sotalol in suppressing ventricular tachycardia or ventricular fibrillation in patients with healed myocardial infarcts; 33

Myocardial ischemia

See also Ischemia

A comparison of amplitude-modulated and frequency-modulated ambulatory monitoring systems: 76

Early detection of myocardial ischemia by myocardial free fatty acid extraction in patients with exercise-induced angina pectoris: 180

Effects of diltiazem alone or with isosorbide dinitrate or with atendiol both acutely and chronically for stable angina pectoris; 717

Intracoronary endothelin induces myocardial ischemia by small vessel constriction in the dog: 956

Prevalence, time course and malignancy of ventricular arrhythmia during spontaneous ischemic ST-segment depression; 900

Prognostic significance of silent myocardial ischemia detected by early treadmill exercise after coronary angioplasty; 1

Prognostic value of intravenous dipyridamole thallium scintigraphy after an acute myocardial ischemic event; 161

Myocardial perfusion

Use of technetium-99m isonitrile (RP-30A) in assessing left ventricular perfusion and function at rest and during exercise in coronary artery disease, and comparison with coronary arteriography and exercise thallium-201 SPECT imaging; 270

Myxoma

Myxoma attached solely to the tricuspid valve; 546

Naloxone

Hemodynamic effects of high dose naloxone in congestive heart failure: 542

Natriuretic factor

Inefficacy of daily single bolus dose atrial natriuretic factor in chronic congestive heart failure: 948

Necropsy findings in opiate addicts Modes of death and types of cardiac diseases in opiate addicts: analysis of 168 necropsy cases; 909

Neurohumoral control

Attenuation of the pressor response to intravenous furosemide by angiotensin converting enzyme inhibition in congestive heart failure; 1382

Niacin

Effect of a modified, well-tolerated niacin regimen on serum total cholesterol, high density lipoprotein cholesterol and the cholesterol to high density lipoprotein ratio; 725

Nifedipine

Comparison of atenolol and nifedipine in chronic stable angina pectoris; 186 Comparison of nifedipine, propranolol and isosorbide dinitrate on angiographic progression and regression of coronary

arterial narrowings in angina pectoris; 433 Nitrate

Effects of sublingual nitrate in patients receiving sustained therapy of isosorbide dinitrate for coronary artery disease; 565 Nitrates

Comparative effects of theophylline and isosorbide dinitrate on exercise capacity in stable angina pectoris, and their mechanisms of action: 1098

Sustained effect of and lack of development of tolerance to controlled-release isosorbide-5mononitrate in chronic stable angina pectoris; 569

Nitrate telerance

Effects of sublingual nitrate in patients receiving sustained therapy of isosorbide dinitrate for coronary artery disease; 565 Interval therapy to avoid nitrate tolerance: paradise regained? 931

Nitroglycerin

Significance of nitroglycerin-induced hypotension with inferior wall acute myocardial infarction; 311

Nondiabetics

Hyperglycemia and prognosis of acute myocardial infarction in patients without diabetes mellitus; 885

Nonionic contrast media

Nephrotoxicity of nonionic contrast media after cardiac angiography; 815 Non-Q-wave myocardial infarction

Cardiac event rate after non-Q-wave acute

myocardial infarction and the significance of its anterior location; 1236 Nonsustained ventricular

tachycardia Conversion of sustained into nonsustained ventricular tachycardia during therapy assessment by programmed ventricular stimulation: criterion for a positive drug effect? 329

Norepinephrine

Relation between plasma norepinephrine and response to medical therapy in men with congestive heart failure secondary to coronary artery disease or idiopathic dilated cardiomyopathy; 609

Nuclear magnetic resonance imaging

Usefulness of nuclear magnetic resonance imaging for evaluation of pericardial effusions, and comparison with twodimensional echocardiography; 1004

Obesity

Correlation of intraabdominal fat accumulation and left ventricular performance in obesity;

Impact of age on echocardiographic left ventricular mass in a healthy population (The Framingham Study); 1066

Occlusion

Magnum wire for balloon recanalization of chronic total coronary occlusions; 148 Percutaneous catheter closure of the ductus arteriosus in children and young adults; 218

Percutaneous transluminal angioplasty of a totally occluded venous bypass graft: a challenge that should be resisted; 88

Predictors of success in percutaneous transluminal coronary angioplasty of chronic total occlusions; 1264

Omega-3 fatty acids

Usefulness of fish oil supplements in preventing clinical evidence of restenosis after percutaneous transluminal coronary angioplasty; 294

Orthotopic heart transplantation

Diffuse coronary vasospasm and accelerated atherosclerosis in a transplanted human heart: 825

Maximal coronary vasodilator capacity of orthotopic heart transplants in patients with and without rejection; 513

Overweight

Importance of overweight in studies of left ventricular hypertrophy and diastolic function in mild systemic hypertension; 752

Oximetric quantitation of intracardiac left-toright shunting: !imitations of the Qp/Qs ratio; 246

Oxygen consumption

Limitations of the metabolic rate meter for measuring oxygen consumption and cardiac output; 783

Oxygen delivery, oxygen consumption and hemoglobin-oxygen affinity in acute myocardial infarction; 977

Oxygen delivery

Oxygen delivery, oxygen consumption and hemoglobin-oxygen affinity in acute myocardial infarction; 977

Pacemaker mode

Influence of cardiac pacing mode on the longterm development of atrial fibrillation; 1376

Pacemakers

An office-based exercise protocol for predicting chronotropic response of activity-triggered, rate-variable pacemakers; 27

Influence of cardiac pacing mode on the long term development of atrial fibrillation: 1376 Multicenter long-term results of antitachycardia pacing for supraventricular tachycardias; 191

Pacemaker syndrome

Pacemaker syndrome in activity-responsive VVI pacing; 124

Pacing

An office-based exercise protocol for predicting chronotropic response of activity-triggered, rate-variable pacemakers; 27

Increase in plasma atrial natriuretic factor during ventriculoatrial pacing; 236

Multicenter long-term results of antitachycardia pacing for supraventricular tachycardias; 191 Pacemaker syndrome in activity-responsive VV! pacing; 124

Usefulness of esophageal pill electrode atrial pacing with quantitative two-dimensional echocardiography for diagnosing coronary artery disease; 730

Pain

Intermittent, dose-related fluctuations of pain and ST elevation during infusion of recombinant tissue plasminogen activator during acute myocardial infarction; 225

Paroxysmal supraventricular tachyarrhythmias

Influence of cardiac pacing mode on the longterm development of atrial fibrillation; 1376

Paroxysmal supraventricular tachycardia

Role of intravenous isoproterenol in the electrophysiologic induction of atrioventricular node reentrant tachycardia in patients with dual atrioventricular node pathways; 1131

Paroxysmal tachycardia

Random and nonrandom behavior of symptomatic paroxysmal atrial fibrillation; Peak filling rate

Differing responses in right and left ventricular filling, loading and volumes during positive end-expiratory pressure; 772

Pediatrics

Rate-responsive ventricular pacing in pediatric patients; 1052

Univariate genetic analysis of blood pressure in children (The Medical College of Virginia Twin Study); 1333

PEEP

Differing responses in right and left ventricular filling, loading and volumes during positive end-expiratory pressure; 772

Percutaneous cardiopulmonary support system

Prolonged ventricular fibrillation-salvage using a new percutaneous cardiopulmonary support system; 545

Percutaneous coronary atherectomy

Safety of percutaneous coronary atherectomy with deep arterial resection: 538

Percutaneous revascularization devices

Restenosis after excellent angiographic angioplasty result for chronic total coronary artery occlusion-implications for newer percutaneous revascularization devices; 667

Percutaneous transluminal balloon angioplasty

Percutaneous transluminal balloon angioplasty for obstruction of the suprahepatic inferior vena cava and cavo-atrial graft stenosis; 397

Percutaneous transluminal coronary angioplasty

Comparison of exercise test responses before and after either percutaneous transluminal coronary angioplasty or coronary artery bypass grafting; 1039

Coronary angioplasty using the probing catheter in combination with the probe™ balloon wire: 1041

Hemodynamic and echocardiographic assessment of the effects of diltiazem during transient occlusion of the left anterior descending coronary artery during percutaneous transluminal coronary

angioplasty; 849 High incidence of acute coronary occlusions complicating percutaneous transluminal coronary angioplasty for angina pectoris; 665

Predictors of success in percutaneous transluminal coronary angioplasty of chronic total occlusions; 1264

Return to work after percutaneous transluminal coronary angioplasty; 1108

Usefulness of fish oil supplements in preventing clinical evidence of restenosis after percutaneous transluminal coronary angioplasty; 294

Usefulness of percutaneous transluminal coronary angioplasty in alleviating silent myocardial ischemia in patients with absent or minimal painful myocardial ischemia; 560

Pericardial constriction

Mechanism underlying Kussmaul's sign in chronic constrictive pericarditis; 1069

Pericardial effusion

Usefulness of nuclear magnetic resonance imaging for evaluation of pericardial effusions, and comparison with twodimensional echocardiography; 1004

Pericardiocentesis-Induced subepicardial hematoma

Echocardiographic detection of pericardiocentesis-induced subepicardial and intramyocardial hematoma; 820

Peripheral vascular disease

Noninvasive assessment of peripheral vascular disease by color flow Doppler/twodimensional ultrasound: 247

Peripheral vascular surgery

Frequency and significance of early postoperative silent myocardial ischemia in patients having peripheral vascular surgery; 1113

Pharmacokinetics

Correlation of amiodarone dosage, heart rate, QT interval and corneal microdeposits with serum amiodarone and desethylamiodarone concentrations; 1138

Single-bolus injection of recombinant tissuetype plasminogen activator in acute myocardial infarction; 448

Pharmacologic cardioversion

Effectiveness of intravenous propafenone for conversion of atrial fibrillation and flutter of recent onset; 335

Pharmacologic tests

Stress and pharmacologic tests as methods to identify patients with Wolff-Parkinson-White syndrome at risk of sudden death: 487

Phonocardiography

Continuous spectral analysis of heart murmurs for evaluating stenotic cardiac lesions; 625

Physical activity

Impact of age on echocardiographic left ventricular mass in a healthy population (The Framingham Study); 1066

Plasma renin activity
Long-term predictors of sudden and low output death in chronic congestive heart failure secondary to coronary artery disease; 1343

Plasminogen activator inhibitor

Correlation of baseline plasminogen activator inhibitor activity with patency of the infarct artery after thrombolytic therapy in acute myocardial infarction; 1231

Platelet aggregation inhibitors Effect of aspirin on myocardial ischemia; 387

Platelet scintigraphy

Early image acquisition after administration of indium-111 platelets in clinically suspected deep venous thrombosis; 363

Plethysmography

Importance of overweight in studies of left ventricular hypertrophy and diastolic function in mild systemic hypertension; 752

Positron emission tomography

Positron emission tomography using fluorine-18 deoxyglucose in evaluation of coronary artery bypass grafting; 860

Postinfarction angina

Angiographic characteristics of the infarctrelated coronary artery in patients with angina pectoris after myocardial infarction;

Postmenopausal women

Effect of estrogen replacement therapy on the ST-segment response to postural and hyperventilation stimuli; 1076

Postoperative complications

Usefulness of the severity and extent of reversible perfusion defects during thallium-dipyridamole imaging for cardiac risk assessment before noncardiac surgery; 276

Postreceptor defect

Localization of a "postreceptor" defect in human dilated cardiomyopathy; 812

Predictors of morbidity

Predictors of rhythm disturbances and subsequent morbidity after the Fontan operation: 762

Predictors of mortality

Long-term predictors of sudden and low output death in chronic congestive heart failure secondary to coronary artery disease; 1343

Pregnancy

Increases in atrial natriuretic peptide after delivery and in the puerperium; 674 Percutaneous double balloon mitral valvuloplasty in pregnant women; 99

Preload

Effects of left ventricular preload and afterload on ascending aortic blood velocity and acceleration in coronary artery disease; 856

Pressure half-time

Influence of transmitral filling dynamics on continuous-wave Doppler assessment of aortic regurgitation by half-time methods;

Primary aortic sarcoma

Primary aortic sarcoma mimicking aortic dissection; 549

Proarrhythmia

Lessons to be learned from the Cardiac Arrhythmia Suppression Trial; 1189

Probability analysis

International application of a new probability algorithm for the diagnosis of coronary artery disease; 304

Probe™ balloon wire

Coronary angioplasty using the probing catheter in combination with the probe™ balloon wire; 1041

Procainamide

Stress and pharmacologic tests as methods to identify patients with Wolff-Parkinson-White syndrome at risk of sudden death; 487

Prognosis

A new epidemiologic classification system for interim myocardial infarction from serial electrocardiographic changes; 454

Characteristics associated with early (A3 months) versus late (>3 months to A3 years) mortality after acute myocardial infarction: 315

Exercise thallium-201 scintigraphy and prognosis in typical angina pectoris and negative exercise electrocardiography; 282 Long-term prognosis of transient acute

myocardial ischemia at rest; 889

Long-term variability of angina pectoris and electrocardiographic signs of ischemia in syndrome X; 139

Predictive value of indium-111 antimyosin uptake for improvement of left ventricular wall motion after thrombolysis in acute myocardial infarction; 167

Prognosis after acute myocardial infarction in patients with and without residual anterograde coronary blood flow; 155

Prognosis in patients with a strongly positive exercise electrocardiogram; 1284

Prognosis in peripartum cardiomyopathy; 540 Prognostic significance of silent myocardial ischemia detected by early treadmill exercise

after coronary angioplasty; 1
Prognostic value of intravenous dipyridamole thallium scintigraphy after an acute myocardial ischemic event; 161

Risk of adverse outcome in patients admitted to the coronary care unit with suspected unstable angina pectoris; 845

Programmed stimulation

Conversion of sustained into nonsustained ventricular tachycardia during therapy assessment by programmed ventricular stimulation: criterion for a positive drug effect? 329

Sequelae of nonsustained polymorphic ventricular tachycardia induced during programmed ventricular stimulation; 1148

Propafenone

Effectiveness of intravenous propafenone for conversion of atrial fibrillation and flutter of recent onset; 335

Effect of propafenone hydrochloride on lymphocyte membrane beta₂ adrenoceptors in ventricular arrhythmias; 671

Stress and pharmacologic tests as methods to identify patients with Wolff-Parkinson-White syndrome at risk of sudden death; 487

Propranolol

Comparison of nifedipine, propranolol and isosorbide dinitrate on angiographic progression and regression of coronary arterial narrowings in angina pectoris; 433

Physiologic relation between cardiac cycle and QT duration in healthy volunteers; 481

Prostacyclin

Superior antiplatelet action of alternate day pulsed dosing versus split dose administration of aspirin; 1185

Prosthetic heart valves

Color flow Doppler evaluation of cardiac bioprosthetic valves; 1389

Extensive multifocal myocardial infarcts from cloth emboli after replacement of mitral and aortic valves with cloth-covered, caged-ball prostheses; 410

Prosthetic valve dysfunction

Diagnostic role of intraoperative epicardial echocardiography following complications of mitral valve replacement with the Bjork-Shiley prosthetic valve; 1402

Prosthetic valves

Color flow Doppler evaluation of St. Jude Medical prosthetic valves: 1387

Puerperium

Increases in atrial natriuretic peptide after delivery and in the puerperium; 674

Pulmonary artery catheterization

Prospective Doppler echocardiographic evaluation of pulmonary artery diastolic pressure in the medical intensive care unit;

Pulmonary artery sling

Operative correction of subcarinal left pulmonary artery originating from the right pulmonary artery; 687

Pulmonary artery wedge pressure

Noninvasive measurement of left ventricular filling pressures by means of transmitral pulsed Doppler ultrasound; 655

Pulmonary capillary wedge pressure

Noninvasive assessment of central circulatory pressures by analysis of ear densitographic changes during the Valsalva maneuver; 787

Pulmonary emboli

Severe pulmonary hypertension and cor pulmonale in the acquired immunodeficiency syndrome; 1396

Pulmonary fibrosis

Usefulness of serial pulmonary function testing as an indicator of amiodarone toxicity; 1322

Pulmonary function

Usefulness of serial pulmonary function testing as an indicator of amiodarone toxicity; 1322

Pulmonary hypertension

Doppler echocardiography and ultrafast cine computed tomography during dynamic exercise in chronic parenchymal pulmonary disease: 528

Severe pulmonary hypertension and cor pulmonale in the acquired immunodeficiency syndrome; 1396

Pulmonary regurgitation

Prospective Doppler echocardiographic evaluation of pulmonary artery diastolic pressure in the medical intensive care unit; 1366

Pulmonary thromboembolism

Circadian distribution in fatal pulmonary thromboembolism; 403

Pulsed Doppler ultrasound

Noninvasive measurement of left ventricular filling pressures by means of transmitral pulsed Doppler ultrasound; 655

Qp/Qs ratio

Oximetric quantitation of intracardiac left-toright shunting: limitations of the Qp/Qs ratio; 246

QT interval

Correlation of amiodarone dosage, heart rate, OT interval and corneal microdeposits with serum amiodarone and desethylamiodarone concentrations; 1138

Quality of life

Changes in dyspnea-fatigue ratings as indicators of quality of life in the treatment of congestive heart failure; 50

Quantitative angiography

Initial angiographic results in ablation of atherosclerotic plaque by percutaneous coronary excimer laser angioplasty without subsequent balloon dilatation; 1253

Quantitative coronary angiography

Comparative effects of theophylline and isosorbide dinitrate on exercise capacity in stable angina pectoris, and their mechanisms of action: 1098

Quantitative assessment of coronary arterial diameter before and after coronary artery bypass grafting; 261

Quantitative coronary arteriography

Angiographic characteristics of the infarctrelated coronary artery in patients with angina pectoris after myocardial infarction; 257

Comparison by quantitative angiographic assessment of coronary stenoses of one view showing the severest narrowing to two orthogonal views; 462

Quantitative arteriographic responses to ergonovine provocation in subjects with atypical chest pain; 778

Quantitative thallium-201 scintigraphy

Quantitative comparison of thallium-201 scintigraphy after exercise and dipyridamole in coronary artery disease: 871

Radioisotopes

Usefulness of the severity and extent of reversible perfusion defects during thalliumdipyridamole imaging for cardiac risk assessment before noncardiac surgery; 276

Radionuclide angiography

Influence of temporal smoothing on quantitation of left ventricular function by gated blood pool scintigraphy; 921

Prevalence of silent myocardial ischemia in survivors of cardiac arrest; 591

Use of technetium-99m isonitrile (RP-30A) in assessing left ventricular perfusion and function at rest and during exercise in coronary artery disease, and comparison with coronary arteriography and exercise thallium-201 SPECT imaging; 270

Radionuclides

Usefulness of the severity and extent of reversible perfusion defects during thalliumdipyridamole imaging for cardiac risk assessment before noncardiac surgery; 276

Radionuclide ventriculography Importance of overweight in studies of left ventricular hypertrophy and diastolic

function in mild systemic hypertension; 752 Noninvasive cardiac risk stratification of diabetic and nondiabetic uremic renal allograft candidates using dipyridamole-thallium-201 imaging and radionuclide ventriculography; 1019

Prognostic utility of predischarge dipyridamole thallium imaging compared to predischarge submaximal exercise electrocardiography and maximal exercise thallium imaging after uncomplicated acute myocardial infarction;

Rate-responsive ventricular pacing Rate-responsive ventricular pacing in pediatric

patients; 1052

Recombinant tissue-type plasminogen activator

Single-bolus injection of recombinant tissuetype plasminogen activator in acute myocardial infarction; 448

Reemployment

Reemployment following implantation of the automatic cardioverter defibrillator: 199

Relaxation change

Prevalence and signficance of left ventricular filling abnormalities determined by Doppler echocardiography in young type I (insulindependent) diabetic patients; 1010

Renal disease

Role of anemia in the pathogenesis of left ventricular hypertrophy in end-stage renal disease: 222

Renal transplantation

Noninvasive cardiac risk stratification of diabetic and nondiabetic uremic renal allograft candidates using dipyridamole-thallium-201 imaging and radionuclide ventriculography; 1019

Effects of low altitude exposure on 24-hour blood pressure and adrenergic activity; 1379

Reperfusion

A physiologically based model of creatine kinase-MB release in reperfusion of acute myocardial infarction: 11

Resistive exercise

Effects of high resistance training in coronary artery disease; 866

Restenosis

Balloon dilatation of symptomatic subacute intimal dissection presenting as restenosis;

Identifying patients at high risk for restenosis after percutaneous transluminal coronary angioplasty for unstable angina pectoris; 289

Intermediate-term follow-up results of balloon aortic valvuloplasty in infants and children with special reference to causes of restenosis; 1356

Usefulness of fish oil supplements in preventing clinical evidence of restenosis after percutaneous transluminal coronary angioplasty; 294

Retingl

Changes in plasma vitamin levels in the first 48 hours after onset of acute myocardial infarction: 971

Return to work

Return to work after percutaneous transluminal coronary angioplasty; 1108

Right ventricle

Effects of occlusion of the left anterior descending coronary artery during angioplasty on right-sided cardiac pressures and electrocardiographic changes; 577

Reduced exercise capacity of chronic obstructive pulmonary disease patients exercising with noseclip/mouthpiece; 1180

Right ventricular ejection fraction Effect of exercise and cavity size on right ventricular function in morbid obesity; 1361

Right ventricular failure

Severe pulmonary hypertension and cor pulmonale in the acquired immunodeficiency syndrome; 1396

Right ventricular hypertrophy

Severe pulmonary hypertension and cor pulmonale in the acquired immunodeficiency syndrome; 1396

Right ventricular infarction

Significance of nitroglycerin-induced hypotension with inferior wall acute myocardial infarction; 311

Right ventricular internal dimension

Effect of exercise and cavity size on right ventricular function in morbid obesity; 1361

Right ventricular outflow tract Nonsustained ventricular tachycardia arising

from the right ventricular outflow tract; 594 Right ventricular systolic function

Effect of exercise and cavity size on right ventricular function in morbid obesity; 1361

Risk factors Coronary risk associated with age and sex of parental heart disease in the Framingham Study: 555

Prognosis in peripartum cardiomyopathy; 540

Risk stratification

Noninvasive cardiac risk stratification of diabetic and nondiabetic uremic renal allograft candidates using dipyridamole-thallium-201 imaging and radionuclide ventriculography; 1019

Prognostic utility of predischarge dipyridamole thallium imaging compared to predischarge submaximal exercise electrocardiography and maximal exercise thallium imaging after uncomplicated acute myocardial infarction; 1243

RP-30A

Use of technetium-99m isonitrile (RP-30A) in assessing left ventricular perfusion and function at rest and during exercise in coronary artery disease, and comparison with coronary arteriography and exercise thallium-201 SPECT imaging; 270

RV₆:RV₅ voltage ratio

Differential sensitivity of the RV6:RV5 voltage ratio by pathogenesis of left ventricular hypertrophy and diagnostic cutpoint; 817

Salt

Usefulness of twenty-four-hour blood pressure patterns and response to short-term sodium restriction in normotensive subjects in datecting a predisposition to systemic arterial hypertension; 604

Self-efficacy

Return to work after percutaneous transluminal coronary angioplasty; 1108 Serum total cholesterol

Effect of a modified, well-tolerated niacin regimen on serum total cholesterol, high density lipoprotein cholesterol and the cholesterol to high density lipoprotein ratio: 725

Severe obesity

Mitral valve replacement for mitral lipoma associated with severe obesity; 1405

Sex

Influence of age and sex on left ventricular filling at rest in subjects without clinical cardiac disease; 646

Sibling occurrence

Occurrence of congenital heart defects in siblings of patients with univentricular heart and tricuspid atresia; 768

Sickle cell anemia

Hemodynamic changes during sickle cell crisis; 1211

Signal averaging

Differentiation between late potentials of right ventricular and of left ventricular origin; 37 Role of bandpass filters in optimizing the value of the signal-averaged electrocardiogram as a predictor of the results of programmed stimulation; 16

Silent ischemia

Clinical correlates and prognostic significance of type A behavior and silent myocardial ischemia on the treadmill; 1280

Usefulness of percutaneous transluminal coronary angioplasty in alleviating silent myocardial ischemia in patients with abse or minimal painful myocardial ischemia; 560

Silent myocardial ischemia

Frequency and significance of early postoperative silent myocardial ischemia in patients having peripheral vascular surgery; 1113

Painful versus silent myocardial ischemia during leg and arm exercise testing in stable angina pectoris: 300

Single bolus injection

Single-bolus injection of recombinant tissue-type plasminogen activator in acute myocardial infarction; 448

Usefulness of twenty-four-hour blood pressure patterns and response to short-term sodium restriction in normotensive subjects in detecting a predisposition to systemic arterial hypertension; 604

Sotalol

Relation between ventricular function and antiarrhythmic responses to sotalol; 943 Usefulness of sotalol in suppressing ventricular tachycardia or ventricular fibrillation in patients with healed myocardial infarcts; 33

Spectral analysis

Continuous spectral analysis of heart murmurs for evaluating stenotic cardiac lesions; 625

Spontaneous angina

Prevalence, time course and malignancy of ventricular arrhythmia during spontaneous ischemic ST-segment depression; 900

Spontaneous coronary artery

dissection Clinical course and long-term prognosis of

spontaneous coronary artery dissection; 471 Spontaneous reversible spasm

Spontaneous reversible spasm in an internal mammary artery graft causing acute myocardial infarction; 822

Stable angina

Comparative effects of theophylline and isosorbide dinitrate on exercise capacity in stable angina pectoris, and their mechanisms of action: 1098

Usefulness of sustained-release diltiazem for stable angina pectoris; 1249

Static exercise

Weight carrying versus handgrip exercise testing in men with coronary artery disease; 736

ST depression

Prevalence, time course and malignancy of ventricular arrhythmia during spontaneous ischemic ST-segment depression; 900

Stenosis

Comparative evaluation of coronary stenoses using fluid dynamic equations and standard quantitative coronary arteriography; 6

Stenotic mitral valves

Analysis of calcium, zinc, magnesium, iron and copper content in myocardium and stenotic mitral valves; 1392

ST/HR slope

Computer-based implementation of the ST-segment/heart rate slope; 926

St. Jude valves

Color flow Doppler evaluation of cardiac bioprosthetic valves; 1389 Color flow Doppler evaluation of St. Jude Medical prosthetic valves; 1387

Strength training

Effects of high resistance training in coronary artery disease; 866 Streptokinase

Safety of intraaortic balloon counterpulsation in patients with acute myocardial infarction receiving streptokinase intravenously; 937

Stress test

Stress and pharmacologic tests as methods to identify patients with Wolff-Parkinson-White syndrome at risk of sudden death; 487

ST segment

Correlation of ischemic ST-segment depression on the resting electrocardiogram with new cardiac events in 1,106 patients over 62 years of age; 232

Intermittent, dose-related fluctuations of pain and ST elevation during infusion of recombinant tissue plasminogen activator during acute myocardial infarction; 225

ST-segment abnormalities

Effect of estrogen replacement therapy on the ST-segment response to postural and hyperventilation stimuli; 1076

ST-segment changes

ST-segment changes during transmural myocardial ischemia in chronic left bundle branch block; 1216

ST-segment depression

Computer-based implementation of the STsegment/heart rate slope; 926

Subacute intimal dissection

Balloon dilatation of symptomatic subacute intimal dissection presenting as restenosis;

Sudden death

Ambulatory electrocardiographic findings in out-of-hospital cardiac arrest secondary to coronary artery disease; 801

Prevalence of silent myocardial ischemia in survivors of cardiac arrest: 591

Qualitative and quantitative comparison of amounts of narrowing by atherosclerotic plaques in the major epicardial coronary arteries at necropsy in sudden coronary death, transmural acute myocardial infarction, transmural healed myocardial

infarction and unstable angina pectoris; 324
Supraventricular arrhythmia

Differentiation of the origin of wide QRS complexes by the net amplitude of the QRS in lead V6; 1053

Supraventricular tachycardia

Atenolol in children with supraventricular tachycardia; 233

Immediate improvement in left ventricular function after cardioversion of atrial flutter;

Multicenter long-term results of antitachycardia pacing for supraventricular tachycardias: 191

Random and nonrandom behavior of symptomatic paroxysmal atrial fibrillation;

Supraventricular tachycardia, pediatric

Adenosine in altering short- and long-term treatment of supraventricular tachycardia in

Surgery

Comparison of cardiovascular adjustments to exercise in adolescents 8 to 15 years of age after correction of tetralogy of Fallot, ventricular septal defect or atrial septal defect: 213

Detection of left atrial thrombi by twodimensional echocardiography and surgical correlation in 148 patients with mitral valve disease: 243

Operative therapy of atrioventricular node reentry and results of an anatomically guided procedure; 1327

Reemployment following implantation of the automatic cardioverter defibrillator; 199

Clinical correlates and prognostic significance of type A behavior and silent myocardial ischemia on the treadmill; 1280

Long-term prognosis of transient acute myocardial ischemia at rest; 889

Type A behavior and survival: a follow-up study of 1,467 patients with coronary artery disease: 427

Sustained-release diltiazem

Usefulness of sustained-release diltiazem for stable angina pectoris; 1249

Symposium: Cardiovascular Diagnosis-Implications for Imaging in the 1990s

Angiographic implications of cardiac transplantation; 16E

Cardiovascular applications of nuclear magnetic resonance spectroscopy; 38E

Cardiovascular effects of contrast agents: 2E Contrast-associated nephropathy; 22E

Effects of contrast media on endothelial cell monolayers under controlled flow conditions;

Evolving applications of coronary angioplasty: technical and angiographic considerations; 27F

Introduction; 1E

Magnetic resonance imaging and the future of cardiac imaging; 60E

Management of high-risk coronary angioplasty;

Myocardial ischemia and clinical applications of positron emission tomography; 46E Ultrafast computed tomography in the

diagnosis of cardiac disease; 54E Symposium: Cardiovascular

Therapy—The Next Step
Calcium antagonists and myocardial protection;

Changing concepts in the pathophysiology of myocardial ischemia; 3F

Comparative study of the effect of nifedipine versus diltiazem on exercise performance, serum propranolol levels, and ST-segment abnormalities in patients with chronic stable angina taking propranolol; 27F

Introduction; 1F

Nifedipine and systemic hypertension; 46F Nifedipine, but not propranolol, improves left ventricular systolic and diastolic function in patients with hypertension; 51F

Noninvasive ambulatory blood pressure monitoring in patients with recently detected systemic hypertension; 62F

Pathophysiologic role of calcium in the development of vascular smooth muscle tone; 35F

Renal hemodynamic effects of calcium antagonists; 41F

The Nifedipine gastrointestinal therapeutic system in the treatment of hypertension; 65F Usefulness of nifedipine for myocardial

ischemia and the nifedipine gastrointestinal therapeutic system; 31F What factors predict recovery of contractile

function in the canine model of the stunned myocardium; 18F

Symposium: Clinical Experience with a Second Generation Calcium Antagonist-Nicardipine, a Vasoselective

Antihypertensive and antiischemic effects of nicardipine and nitroprusside in patients undergoing coronary artery bypass grafting;

Cellular action of nicardipine; 3H Comparison of intravenous nicardipine and nitroglycerin to control systemic hypertension after coronary artery bypass grafting; 19H

Effects of intravenous and intracoronary nicardipine; 8H

Hemodynamic assessment of nicardipine alone and with atenolol in coronary artery disease using a modified echo-Doppler device; 28H

Intravenous nicardipine in severe systemic hypertension: 16H

Long-term systemic arterial blood pressure control with nicardipine; 35H Symposium overview; 1H

Symposium: Early Intervention in the Treatment of Acute Myocardial Infarction-Clinical Profile of Eminase (APSAC)

Comparison of thrombolytic agents: selected hematologic, vascular and clinical events; 2A

Discussion; 24A, 41A

Increased survival after APSAC: 30-day and 12month mortality data from the APSAC Intervention Mortality Study; 27A

Introduction: 1A

Limitation of myocardial infarct size and preservation of left ventricular function by early administration of APSAC in myocardial infarction; 18A

Potential use of thrombolytic therapy before hospitalization; 8A

Prehospital use of APSAC: results of a placebocontrolled study; 30A

Reperfusion, patency and reocclusion with anistreplase (APSAC) in acute myocardial infarction: 12A

Unanswered questions in thrombolysis; 34A

Symposium: Lipid Dynamics and Atherosclerosis

Clinical significance of plasma lipid levels; 3G Drug therapy and the prevention of atherosclerosis in humans; 31G

High-density lipoprotein cholesterol levels as a marker of reverse cholesterol transport; 10G Introduction; 1G

Pathophysiology of the atherogenic process; 23G

Role of biologically modified low-density lipoprotein in atherosclerosis: 18G

Symposium: Myocardial Infarction-Direction for the

Antithrombotic therapy in acute myocardial infarction: prevention of venous, left ventricular and coronary artery thromboembolism; 33B

Antithrombotic therapy in the primary prevention of acute myocardial infarction; 29B

Introduction; 1B

New concepts in the pathophysiology of acute myocardial infarction; 2B

Nonthrombolytic intervention in acute myocardial infarction; 25B

Patient selection for percutaneous transluminal coronary angioplasty in acute myocardial infarction; 22B

Patient selection for thrombolytic therapy; 17B Prevention of left ventricular mural thrombus;

Radionuclide imaging of myocardial perfusion and viability in assessment of acute myocardial infarction; 9B

Symposium: New Trends in the **Treatment of Rhythm** Disorders

An outlook on future trends in the treatment of rhythm disorders; 2J

Arrhythmias and their treatment in patients with heart failure; 61J

Classification of antiarrhythmic drugs based on ventricular fibrillation threshold; 11J

Devices for tachycardia termination; 70J Differentiation and mechanisms of prevention and termination of verapamil-sensitive sustained ventricular tachycardia; 46J

Electrophysiologic basis of catheter ablation in atrial flutter; 79J

Electrophysiologic properties of atrial muscle in paroxysmal atrial fibrillation; 21J Evaluation of antifibrillatory effects of drugs;

33J Foreword; 1J

Hemodynamic effects of antiarrhythmic drugs: negative inotropy versus influence on peripheral circulation; 37J

lonic mechanisms of the depression of automaticity and conduction in the rabbit atrioventricular node caused by hypoxia or metabolic inhibition and protective action of glucose and valine; 25J

New observation on the mechanisms of antiarrhythmic actions of disopyramide on cardiac membranes; 16J

Rate dependence and adrenergic dependence of arrhythmias; 41J

Recent advances in understanding the mechanisms of drug-induced torsades de pointes arrhythmias; 29J

Recent antiarrhythmic drugs; 65J Relevance of cellular to clinical electrophysiology in interpreting antiarrhythmic drug action; 6J

Risk-benefit profiles of antiarrhythmic therapy; 50J

Role of antitachycardia devices in the treatment of ventricular tachyarrhythmias; 75J Summary; 97J

Surgical alternatives for supraventricular tachycardias; 92J

Surgical management of tachyarrhythmias; 87J Treatment of rhythm disorders by endocardial fulguration; 83J

Treatment of ventricular arrhythmias in the coronary patient: what sort of patient? For which rhythm disorder? With which procedure? 57J

Ventricular ectopic activity: prevalence and risk; 53J

Symposium: Pharmacologic and Therapeutic Aspects of Urapidii

Acute responses to urapidil in hypertensive persons; 22D

Conclusions on the position of urapidil; 38D Involvement of brain 5-HT_{1A} receptors in the hypotensive response to urapidil: 7D

Overview of clinical trials with urapidil; 30D Pharmacologic profile of urapidil; 1D

Therapeutic assessment of urapidil or angiotensin-converting enzyme inhibition in systemic hypertension; 25D

Urapidil, a multiple-action alpha-blocking drug; 11D

Urapidil-induced hemodynamic changes in humans; 16D

Symposium: Pharmacology and Therapeutic Considerations of Amiodipine, a New 1,4-Dihydropyridine Calcium Antagonist

Amlodipine, a long-acting calcium antagonist drug reduces ischemia-induced ventricular conduction delay in pig hearts; 781

conduction delay in pig hearts; 781
Amiodipine, a new 1,4-dihydropyridine calcium antagonist with a particularly strong antihypertensive profile; 211

Amlodipine pretreatment and the ischemic heart; 651

Calcium antagonists: review and perspective on mechanism of action; 31

Cardioprotective effects of amlodipine in the ischemic-reperfused heart; 1011

Cellular electrophysiology of amlodipine: probing the cardiac L-type calcium channel; 351

Effects of amlodipine on myocardial ischemiareperfusion injury in dogs; 941

Effects of amlodipine on renal hemodynamics; 1221

Effects of calcium antagonists on lipids and atherosclerosis; 1291

Hemodynamic and electrophysiologic effects of amlodipine, a new calcium channel blocker; 711

Hydrophobic calcium channel ligands: methodical problems and their solution; 431 Inhibition by amlodipine of activity evoked in isolated human coronary arteries by endothelin, prostaglandin F_{2a} and depolarization; 581

Introduction: 11

Pharmacologic profile of amlodipine; 101 Protection of regional mechanics and mitochondrial oxidative phosphorylation by amlodipine in transiently ischemic myocardium; 841

Relaxation of potassium chloride-induced contractions by amlodipine and its interaction with the 1,4-dihydropyridinebinding site in pig coronary artery; 511

Vascular effects of calcium antagonists: implications for hypertension and other risk factors for coronary heart disease; 1171

Symposium: The George E. Burch Festschrift

Albumin uptake by renal lymphatics with and without obstruction of the renal vein; 51C Changes by two dimensional echocardiography

Changes by two-dimensional echocardiography in the myocardial appearance of patients with end-stage renal disease; 40C

Computerized segmental plethysmography and laser flowmetry; 57C

Electrocardiographic wave form and cardiac arrhythmias; 29C

arrhythmias; 29C Foreword—George Burch and the scientist's passion; 1C

George Edward Burch, MD, 1910–1986; 3C Insight into a bad omen for white men: coronary artery disease—the Bogalusa Heart Study; 32C

Interactions between circulating peptides and the central nervous system in hemodynamic regulation; 44C

Pathologic anatomy of the dilated cardiomyopathies; 9C

Relation between the ventriculographic silhouette and topography of thoracic potential in coronary artery disease: 200

potential in coronary artery disease; 20C Type A behavior: its diagnosis, cardiovascular relation and the effect of its modification on recurrence of coronary artery disease; 12C

Syndrome X

Lack of evidence for alpha-adrenergic receptormediated mechanisms in the genesis of ischemia in syndrome X; 264 Long-term variability of angina pectoris and electrocardiographic signs of ischemia in svndrome X: 139

Systemic hypertension

See also Blood pressure; Hypertension Effectiveness of doxazosin in systemic hypertension; 203

Systolic function

Improvement of diastolic function after reversal of left ventricular hypertrophy induced by long-term antihypertensive treatment with tertatolol; 745

Tachycardia

See also Supraventricular tachycardia; Ventricular tachycardia

Multicenter long-term results of antitachycardia pacing for supraventricular tachycardias; 191 Operative therapy of atrioventricular node reentry and results of an anatomically guided procedure: 1327

Tachycardia ablation

Effect of selective intracoronary antiarrhythmic drug administration in sustained ventricular tachycardia; 475

Technetium-99m isonitrile

Use of technetium-99m isonitrile (RP-30A) in assessing left ventricular perfusion and function at rest and during exercise in coronary artery disease, and comparison with coronary arteriography and exercise thallium-201 SPECT imaging; 270

Tetralogy of Fallot

Comparison of cardiovascular adjustments to exercise in adolescents 8 to 15 years of age after correction of tetralogy of Fallot, ventricular septal defect or atrial septal defect; 213

Tetralogy of Fallot with absent pulmonary valve

Prenatal diagnosis and circulatory characteristics in tetralogy of Fallot with absent pulmonary valve; 547

Thallium

Exercise thallium-201 scintigraphy and prognosis in typical angina pectoris and negative exercise electrocardiography; 282

Predictive value of quantitative dipyridamolethallium scintigraphy in assessing cardiovascular risk after vascular surgery in diabetes mellitus: 1275

Usefulness of the severity and extent of reversible perfusion defects during thalliumdipyridamole imaging for cardiac risk assessment before noncardiac surgery; 276

Thallium-201

Prognostic value of atrial pacing and thallium-201 scintigraphy in patients with stable chest pain; 987

Prognostic value of intravenous dipyridamole thallium scintigraphy after an acute myocardial ischemic event; 161

Usefulness of thallium-201 scintigraphy in predicting the development of angina pectoris in hypertensive patients with left ventricular hypertrophy; 45

Use of technetium-99m isonitrile (RP-30A) in assessing left ventricular perfusion and function at rest and during exercise in coronary artery disease, and comparison with coronary arteriography and exercise thallium-201 SPECT imaging; 270

Thallium-201 imaging

Comparison of myocardial washout rate of thallium-201 between rest, dipyridamole with and without aminophylline, and exercise states in normal subjects; 1022

Thallium-201 myocardial scintigraphy

Significance of positive or negative thallium-201 scintigraphy in hypertrophic cardiomyopathy; 498

Theophylline

Comparative effects of theophylline and isosorbide dinitrate on exercise capacity in stable angina pectoris, and their mechanisms of action; 1098

Therapeutic anticoagulation

Impact of late coronary artery reperfusion on left ventricular function one month after acute myocardial infarction (results from the ISAM study); 878

Thermodilution

Effect of tricuspid regurgitation on the reliability of the thermodilution cardiac output technique in congestive heart failure; 945

Thrombolysis

Influence of thrombolytic treatment followed by full dose anticoagulation on the frequency of left ventricular thrombi in acute myocardial infarction; 588

Predictive value of indium-111 antimyosin uptake for improvement of left ventricular wall motion after thrombolysis in acute myocardial infarction; 167

Urokinase plus heparin versus aspirin in unstable angina and non-Q-wave myocardial infarction; 840

Thrombolytic therapy

Acute myocardial infarction complicating recanalization of aortocoronary bypass grafts with urokinase therapy; 683

Correlation of baseline plasminogen activator inhibitor activity with patency of the infarct artery after thrombolytic therapy in acute myocardial infarction; 1231

Safety of intraaortic balloon counterpulsation in patients with acute myocardial infarction receiving streptokinase intravenously; 937

Thromboxane

Superior antiplatelet action of alternate day pulsed dosing versus split dose administration of aspirin; 1185

Thrombus

Detection of left atrial thrombi by twodimensional echocardiography and surgical correlation in 148 patients with mitral valve disease; 243

Successful percutaneous transvenous catheter balloon mitral commissurotomy after warfarin therapy and resolution of left atrial thrombus; 126

Tissue plasminogen

Effect of combined administration of saruplase and single-chain alteplase on coronary recanalization in acute myocardial infarction;

Intermittent, dose-related fluctuations of pain and ST elevation during infusion of recombinant tissue plasminogen activator during acute myocardial infarction; 225

Tissue valve

Doppler evaluation of homograft valved conduits in children; 354

Tolerance

Sustained effect of and lack of development of tolerance to controlled-release isosorbide-5mononitrate in chronic stable angina pectoris; 569

a crance with low dose intravenous nitroglycerin therapy in acute myocardial infarction; 581

Transcoronary techniques

Transcoronary techniques and cardiac arrhythmias; 534

Transesophageal

echocardiography A quantitative comparison of transesophageal and epicardial color Doppler echocardiography in the intraoperative assessment of mitral regurgitation; 1168

Transient factors

Ambulatory electrocardiographic findings in out-of-hospital cardiac arrest secondary to coronary artery disease; 801

Transmural myocardial ischemia

ST-segment changes during transmural myocardial ischemia in chronic left bundle branch block; 1216

Transplant coronary artery disease

Acute myocardial infarction in cardiac transplant recipients; 1093

Transthoracic impedance

Electrode pad size, transthoracic impedance and success of external ventricular defibrillation; 741

Treadmill

Usefulness of esophageal pill electrode atrial pacing with quantitative two-dimensional echocardiography for diagnosing coronary artery disease; 730

Treatment

Inefficacy of daily single bolus dose atrial natriuretic factor in chronic congestive heart failure: 948

Tricuspid atresia

Occurrence of congenital heart defects in siblings of patients with univentricular heart and tricuspid atresia; 768

Tricuspid insufficiency

Prevalence of multivavular regurgitation in athletes; 209

Tricuspid regurgitation

Effect of tricuspid regurgitation on the reliability of the thermodilution cardiac output technique in congestive heart failure; 945

True ventricular aneurysm Redefining true ventricular aneurysm; 1192

T-wave on electrocardiogram

Rapid T-wave normalization after balloon pulmonary valvuloplasty in children; 399

Two-dimensional echocardiography

See also Doppler; Echocardiography Detection of left atrial thrombi by twodimensional echocardiography and surgical correlation in 148 patients with mitral valve disease; 243

Two-dimensional echocardiography and Doppler findings in cerebral arteriovenous malformation; 252

Usefulness of nuclear magnetic resonance imaging for evaluation of pericardial effusions, and comparison with twodimensional echocardiography: 1004

Type A behavior pattern

Clinical correlates and prognostic significance of type A behavior and silent myocardial ischemia on the treadmill; 1280

Type A personality

Type A behavior and survival: a follow-up study of 1,467 patients with coronary artery disease: 427

Typical angina

Exercise thallium-201 scintigraphy and prognosis in typical angina pectoris and negative exercise electrocardiography; 282

Ultrafast cine computed tomography

Doppler echocardiography and ultrafast cine computed tomography during dynamic exercise in chronic parenchymal pułmonary disease: 528

Ultrasonic debridement

Ultrasonic debridement of the aortic valve with six-month echocardiographic follow-up; 1206

Ultrastructure

Scanning electron microscopy of operatively excised severely regurgitant floppy mitral valves; 392

Univentricular heart

Occurrence of congenital heart defects in siblings of patients with univentricular heart and tricuspid atresia; 768

Unstable angina

Risk of adverse outcome in patients admitted to the coronary care unit with suspected unstable angina pectoris; 845

Urokinase plus heparin versus aspirin in unstable angina and non-Q-wave myocardial infarction; 840

Unstable angina pectoris

Identifying patients at high risk for restenosis after percutaneous transluminal coronary angioplasty for unstable angina pectoris; 289

Qualitative and quantitative comparison of amounts of narrowing by atherosclerotic plaques in the major epicardial coronary arteries at necropsy in sudden coronary death, transmural acute myocardial infarction, transmural healed myocardial infarction and unstable angina pectoris; 324

Urokinase

Urokinase plus heparin versus aspirin in unstable angina and non-Q-wave myocardial infarction; 840

Urokinase plasminogen

Effect of combined administration of saruplase and single-chain alteplase on coronary recanalization in acute myocardial infarction;

Valsalva maneuver

Noninvasive assessment of central circulatory pressures by analysis of ear densitographic changes during the Valsalva maneuver; 787

Valvular cardiac myxoma Myxoma attached solely to the tricuspid valve;

Valvular heart disease Prevalence of multivavular regurgitation in athletes; 209

Valvular regurgitation

Prevalence of multivavular regurgitation in athletes; 209

Vascular surgery

Predictive value of quantitative dipyridamolethallium scintigraphy in assessing cardiovascular risk after vascular surgery in diabetes mellitus; 1275

Venous contrast echocardiography
Use of venous contrast echocardiography for
diagnosis of cardiac tamponade; 691

Venous return

Reduced exercise capacity of chronic obstructive pulmonary disease patients exercising with noseclip/mouthpiece; 1180

Venous thrombosis

Early image acquisition after administration of indium-111 platelets in clinically suspected deep venous thrombosis; 363

Ventilatory threshold

Cardiorespiratory response to exercise in congenital complete atrioventricular block; 896

Ventricular arrhythmia

Differentiation of the origin of wide QRS complexes by the net amplitude of the QRS in lead V₆: 1053

Ventricular arrhythmias

See also Arrhythmias; Antiarrhythmic agents
Effect of propafenone hydrochloride on
lymphocyte membrane beta₂ adrenoceptors
in ventricular arrhythmias; 671

Prevalence, time course and malignancy of ventricular arrhythmia during spontaneous ischemic ST-segment depression; 900

Significance of positive or negative thallium-201 scintigraphy in hypertrophic cardiomyopathy; 498

Ventricular defibrillation

Adverse effects of permanent cardiac internal defibrillator patches on external defibrillation; 1144

Electrode pad size, transthoracic impedance and success of external ventricular defibrillation; 741

Ventricular diastolic properties

Comparison of Doppler indexes of left ventricular diastolic function with simultaneous high fidelity left atrial and ventricular pressures in idiopathic dilated cardiomyopathy; 1173

Ventricular ectopy

Natural history of potentially lethal ventricular arrhythmias in patients treated with longterm antiarrhythmic drug therapy; 1289

Ventricular fibrillation

Ambulatory electrocardiographic findings in out-of-hospital cardiac arrest secondary to coronary artery disease; 801

Characteristics associated with early (A3 months) versus late (>3 months to A3 years) mortality after acute myocardial infarction; 315

Intravenous amiodarone for the rapid treatment of life-threatening ventricular arrhythmias in critically ill patients with coronary artery disease: 599

Prolonged ventricular fibrillation-salvage using a new percutaneous cardiopulmonary support system; 545 Usefulness of sotalol in suppressing ventricular tachycardia or ventricular fibrillation in patients with healed myocardial infarcts; 33

Ventricular filling

Influence of age and sex on left ventricular filling at rest in subjects without clinical cardiac disease; 646

Ventricular function

Differing responses in right and left ventricular filling, loading and volumes during positive end-expiratory pressure; 772

Ventricular repolarization

Physiologic relation between cardiac cycle and QT duration in healthy volunteers; 481

Ventricular septal defect

Assessment by Doppler color flow mapping of ventricular septal defect after acute myocardial infarction; 668

Comparison of cardiovascular adjustments to exercise in adolescents 8 to 15 years of age after correction of tetralogy of Fallot, ventricular septal defect or atrial septal defect; 213

Ventricular septal rupture

Usefulness of color Doppler flow imaging to distinguish ventricular septal defect from acute mitral regurgitation complicating acute myocardial infarction: 697

Ventricular tachycardia

See also Supraventricular tachycardia; Tachycardia

Argon laser ablation of malignant ventricular tachycardia associated with coronary artery disease: 1298

Efficacy of intravenous propranolol for suppression of inducibility of ventricular tachyarrthythmias with different electrophysiologic characteristics in coronary artery disease; 1305

High grade entrance and exit block in an area of healed myocardial infarction associated with ventricular tachycardia with successful laser photoablation of the anatomic substrate; 122

Histopathologic and electrophysiologic correlations in idiopathic dilated cardiomyopathy and sustained ventricular tachyarrhythmia; 1063

Intravenous amiodarone for the rapid treatment of life-threatening ventricular arrhythmias in critically ill patients with coronary artery disease: 599

Magnesium sulfate therapy for sustained monomorphic ventricular tachycardia; 1202 Morning increase in the time of onset of

sustained ventricular tachycardia; 1204
Nonsustained ventricular tachycardia arising

from the right ventricular outflow tract; 594 Role of bandpass filters in optimizing the value of the signal-averaged electrocardiogram as a predictor of the results of programmed stimulation; 16 Sequelae of nonsustained polymorphic ventricular tachycardia induced during programmed ventricular stimulation; 1148 Ilsefulness of sotaloi in suppressing ventricular

Usefulness of sotalol in suppressing ventricular tachycardia or ventricular fibrillation in patients with healed myocardial infarcts; 33

Ventricular wall

Predictive value of indium-111 antimyosin uptake for improvement of left ventricular wall motion after thrombolysis in acute myocardial infarction; 167

Ventriculography

Late ventricular dilatation in survivors of acute myocardial infarction; 961

Verapamil

Comparison of adenosine and verapamil for termination of paroxysmal junctional tachycardia; 1310

Vitamin D

Changes in plasma vitamin levels in the first 48 hours after onset of acute myocardial infarction; 971

Vitamin E

Changes in plasma vitamin levels in the first 48 hours after onset of acute myocardial infarction; 971

Volume

Factors influencing accuracy in left ventricular volume determination; 661

Wall motion

Left ventricular dysfunction in acute myocardial infarction due to isolated left circumflex coronary artery stenosis; 440

Positron emission tomography using fluorine-18 deoxyglucose in evaluation of coronary artery bypass grafting; 860

Warfarin

Successful percutaneous transvenous catheter balloon mitral commissurotomy after warfarin therapy and resolution of left atrial thrombus: 126

Washout rate

Comparison of myocardial washout rate of thallium-201 between rest, dipyridamole with and without aminophylline, and exercise states in normal subjects; 1022

Weight lifting

Effects of high resistance training in coronary artery disease; 866

Wenckebach periods, reverse

Dynamics of atrioventricular nodal conduction ratios of reverse alternating Wenckebach periods; 1047

Wolff-Parkinson-White syndrome Reversal of electrophysiologic effects of flecainide on the accessory pathway by isoproterenol in the Wolff-Parkinson-White

syndrome; 194

Stress and pharmacologic tests as methods to identify patients with Wolff-Parkinson-White syndrome at risk of sudden death; 487

JULY 1, 1989, VOL. 64, NO. 1

CORONARY ARTERY DISEASE

Prognostic Significance of Silent Myocardial Ischemia **Detected by Early Treadmill Exercise After Coronary** Angioplasty

Ubeydullah Deligonul, Michel G. Vandormael, Liwa T. Younis, and Bernard R. Chaitman

Comparative Evaluation of Coronary Stenoses Using Fluid Dynamic Equations and Standard Quantitative Coronary Arteriography

Brian P. Kimball, Nikolas Dafopoulos, and Victor LiPreti

A Physiologically Based Model of Creatine Kinase-MB Release in Reperfusion of Acute Myocardial Infarction

Lawrence Ong. James Coromilas, John M. Zimmerman, Stephen Green, Vellore Padmanabhan, Peter Reiser, J. Thomas Bigger, Jr., and John Morrison

ARRHYTHMIAS AND CONDUCTION DISTURBANCES

Role of Bandpass Filters in Optimizing the Value of the Signal-Averaged Electrocardiogram as a Predictor of the Results of Programmed Stimulation

Edward B. Caref, Gioia Turitto, Bassiema B. Ibrahim, Raphael Henkin, and Nabil El-Sherif

An Office-Based Exercise Protocol for Predicting Chronotropic Response of Activity-Triggered, Rate-Variable Pacemakers

David G. Benditt, Marcus Mianulli, Joseph Fetter, Simon Milstein, Jeffrey Buetikofer, Ernesto Molina, Frank Wibel, and **Toby Markowitz**

Usefulness of Sotalol in Suppressing Ventricular Tachycardia or Ventricular Fibrillation in Patients with **Healed Myocardial Infarcts**

Dennis L. Kuchar, Hasan Garan, Ferdinand J. Venditti. Dianne Finkelstein, Jeffrey N. Rottman, Janet McComb, Brian A. McGovern, and Jeremy N. Ruskin

37 Differentiation Between Late Potentials of Right Ventricular and of Left Ventricular Origin

Tohru Ohe, Atsushi Konoe, Akihiko Shimizu, Satoshi Daikoku, Shiro Kamakura, Mokuo Matsuhisa, Naohiko Aihara, Iwao Sato, and Katsuro Shimomura

SYSTEMIC HYPERTENSION

Disparate Hemodynamic and Sympatho-aurenergic Responses to Isometric and Mental Stress in Essential

Ehud Grossman, Shmuel Oren, Guillermo E. Garavaglia, Roland Schmieder, and Franz H. Messerli

Usefulness of Thallium-201 Scintigraphy in Predicting the Development of Angina Pectoris in Hypertensive **Patients with Left Ventricular Hypertrophy**

Julio F. Tubau, Jadwiga Szlachcic, Milton Hollenberg, and Barry M. Massie

CONGESTIVE HEART FAILURE

Changes in Dyspnea-Fatigue Ratings as Indicators of Quality of Life in the Treatment of Congestive Heart

Alvan R. Feinstein, Mary B. Fisher, and Joseph G. Pigeon

Myocardial Carnitine in End-Stage Congestive Heart Failure

Mary Ella M. Pierpont, Dianne Judd, Irvin F. Goldenberg, W. Steves Ring, Maria Teresa Olivari, and Gordon L. Pierpont

CARDIOMYOPATHY

Importance of the Left Ventricular Filling Pressure on Diastolic Filling in Idiopathic Dilated Cardiomyopathy Steven J. Lavine and Douglas Arends

METHODS

66 Doppler Echocardiographic Measurement of Low Velocity Motion of the Left Ventricular Posterior Wall

Karl Isaaz, Aubrey Thompson, Gerard Ethevenot, Jean L. Cloez, Beatrice Brembilla, and Claude Pernot

A Comparison of Amplitude-Modulated and Frequency-Modulated Ambulatory Monitoring Systems Alan L. Hinderliter, Edith Bragdon, Margaret Herbst, Martha Ballenger, Lars G. Ekelund, and David S. Sheps

81 A New Doppler Method of Assessing Left Ventricular **Ejection Force in Chronic Congestive Heart Failure** Karl Isaaz, Gerard Ethevenot, Philippe Admant, Beatrice Brembilla, and Claude Pernot, with the technical assistance

of Bernard Chalon **BRIEF REPORTS**

Percutaneous Transluminal Angioplasty of a Totally Occluded Venous Bypass Graft: A Challenge That Should Be Resisted

Pim J. de Feyter, Patrick Serruys, Marcel van den Brand, Hannie Meester, Kevin Beatt, and Harry Suryapranata

Effect of a Media Campaign on Delay Times and Ambulance Use in Suspected Acute Myocardial Infarction

Johan Herlitz, Marianne Hartford, Marianne Blohm, Björn W. Karlson, Lars Ekström, Martin Risenfors, Bertil Wennerblom, Russell V. Luepker, and Stig Holmberg

Intraventricular Conduction Delay in Acute Right Ventricular Ischemia

Hajime Kataoka, Akira Tamura, Shoji Yano, Koreyasu Kanzaki, and Yoshiaki Mikuriya

95

Long-Term Effects of Amiodarone on Hepatic Function Killian Robinson, John P. Mulrow, Edward Rowland, and William J. McKenna

97

Comparison of Blood Pressure Response to Heat Stress in Sauna in Young Hypertensive Patients Treated with Atenolol and Diltiazem

Olavi J. Luurila, Antti Kohvakka, and Stig Sundberg

99

Percutaneous Double Balloon Mitral Valvuloplasty in Pregnant Women

José Armando Mangione, Maria Fernanda de M. Zuliani, José Maria Del Castillo, Eduardo Arantes Nogueira, and Siguemituzo Arie

102

Doppler Echocardiographic Assessment of Shunting Via the Ductus Arteriosus in Newborn Infants Margaret J. Milne, Rita Y.T. Sung, Tai Fai Fok, and lan G. Crozier

106

Transluminal Laser Angioplasty of the Femoropopliteal Circulation by Use of a Percutaneous Popliteal Approach

D. Richard Leachman, Michael G. Avedissian, Zvonimir Krajcer, and Paolo Angelini

109

An Echocardiographic and Anatomic Description of the Donor-Recipient Atrial Anastomosis After Orthotopic Cardiac Transplantation

Randall C. Starling, Peter B. Baker, Steven C. Hirsch, P. David Myerowitz, Timothy A. Galbraith, and Philip F. Binkley

111

Providing Heart-Healthy Alternatives at Cardiology Moetings: Grilled Salmon or Beef Tenderloin? Kelly Maxwell, Alice Ammerman, William C. McGaghie, Clayton H. Bryan, and Ross J. Simpson, Jr.

CASE REPORTS

114

Atherectomy of the Left Main Coronary Artery with Percutaneous Cardiopulmonary Bypass Support David W.M. Muller, Stephen G. Ellis, and Eric J. Topol

110

Coronary Artery Thermal Damage During Percutaneous "Hot Tip" Laser-Assisted Angioplasty Eric Rosenthal, Joseph K. Montarello, Tim Palmer, and Paul V.L. Curry 122

High Grade Entrance and Exit Block in an Area of Healed Myocardial Infarction Associated with Ventricular Tachycardia with Successful Laser Photoablation of the Anatomic Substrate Laszlo Littmann, Robert H. Svenson, John J. Gallagher, and Jay G. Selle

124

Pacemaker Syndrome in Activity-Responsive VVI
Pacing

Hugh P. Liebert, Susan O'Donoghue, William F. Tullner, and Edward V. Platia

126

Successful Percutaneous Transvenous Catheter Balloo Mitral Commissurotomy After Warfarin Therapy and Resolution of Left Atrial Thrombus

Jui-Sung Hung, Fun-Chung Lin, and Cheng-Wen Chiang

128

Transient Atrioventricular Block Resulting from Left Ventricular Angiography in Infants with Ventricular Septal Defect

Roger P. Vermilion, Robert H. Beekman, Dennis C. Crowley, and Amnon Rosenthal

INSTRUCTIONS TO AUTHORS on page 121

JULY 5, 1989, VOL. 64, NO. 2

A Symposium: Early Intervention in the Treatment of Acute Myocardial Infarction — Clinical Profile of Eminase (APSAC)

JULY 15, 1989, VOL. 64, NO. 3

CORONARY ARTERY DISEASE

131

In Vivo Assessment of a Digital Angiographic Method to Measure Absolute Coronary Artery Diameters
Jeffrey J. Popma, Eric J. Eichhorn, and Gregory J. Dehmer

139

Long-Term Variability of Angina Pectoris and Electrocardiographic Signs of Ischemia in Syndrome X Giuseppe Pupita, Juan Carlos Kaski, Alfredo R. Galassi, Margarita Vejar, Filippo Crea, and Attilio Maseri

144

Left Main Coronary Angioplasty: Early and Late Results of 127 Acute and Elective Procedures James H. O'Keefe, Jr., Geoffrey O. Hartzler, Barry D. Rutherford, David R. McConahay, Warren L. Johnson, Lee V. Giorgi, and Robert W. Ligon

140

Magnum Wire for Balloon Recanalization of Chronic Total Coronary Occlusion

Bernhard Meier, Marc Carlier, Leo Finci, Emad Nukta, Philip Urban, Werner Niederhauser, and Josiane Favre

Prognosis After Acute Myocardial Infarction in Patients With and Without Residual Anterograde Coronary Blood Flow

Ricardo G. Cigarroa, Richard A. Lange, and L. David Hillis

161

Prognostic Value of Intravenous Dipyridamole Thallium Scintigraphy After an Acute Myocardial Ischemic Event Liwa T. Younis, Sheila Byers, Leslee Shaw, Grace Barth, Henry Goodgold, and Bernard R. Chaitman

167

Predictive Value of Indium-111 Antimyosin Uptake for Improvement of Left Ventricular Wall Motion After Thrombolysis in Acute Myocardial Infarction Bob van Vlies, Jim Baas, Cees A. Visser, Eric van Royen, Ben J. Delemarre, Hans Bot, and Arend J. Dunning

172

Nuclear Magnetic Resonance Imaging of Acute Myocardial Infarction Within 24 Hours of Chest Pain Onset

Donald L. Johnston, Sharon L. Mulvagh, Richard W. Cashion, Padraig G. O'Neill, Robert Roberts, and Roxann Rokey

180

Early Detection of Myocardial Ischemia by Myocardial Free Fatty Acid Extraction in Patients with Exercise-Induced Angina Pectoris

Susumu Kamihara, Mitsuhiro Yokota, Mitsunori Iwase, Takashi Miyahara, Hiroshi Hayashi, Hidehiko Saito, Satoru Sugiyama, and Takayuki Ozawa

186

Comparison of Atendol and Nifedipine in Chronic Stable Angina Pectoris

William Shapiro, Kenneth A. Narahara, John B. Kostis, Francis Thandroyen, and Lenore R. Zohman

ARRHYTHMIAS AND CONDUCTION DISTURBANCES

191

Multicenter Long-Term Results of Antitachycardia Pacing for Supraventricular Tachycardias Lukas Kappenberger, Hans Valin, and Edgar Sowton

194

Reversal of Electrophysiologic Effects of Flecainide on the Accessory Pathway by Isoproterenol in the Wolff-Parkinson-White Syndrome

Antonis S. Manolis and N.A. Mark Estes, III

199

Reemployment Following Implantation of the Automatic Cardioverter Defibrillator

Karen R. Kalbfleisch, Michael H. Lehmann, Russell T. Steinman, Ken Jackson, Kathi Axtell, Claudio D. Schuger, and Patrick J. Tchou

SYSTEMIC HYPERTENSION

203

Effectiveness of Doxazosin in Systemic Hypertension Richard P. Ames, Steven G. Chrysant, Francisco Gonzalez, Harold W. Schnaper, Stephen Spann, and Manuel T. Velasquez

VALVULAR HEART DISEASE

209

Prevalence of Multivalvular Regurgitation in Athletes Pamela S. Douglas, Gail O. Berman, Mary L. O'Toole, W. Douglas B. Hiller, and Nathaniel Reichek

CONGENITAL HEART DISEASE

212

Comparison of Cardiovascular Adjustments to Exercise in Adolescents 8 to 15 Years of Age After Correction of Tetralogy of Fallot, Ventricular Septal Defect or Atrial Septal Defect

Hélène Perrault, Susan Pamela Drblik, Martine Montigny, Andre Davignon, Andre Lamarre, Claude Chartrand, and Paul Stanley

218

Percutaneous Catheter Closure of the Ductus Arteriosus in Children and Young Adults M.A. Ali Khan, Charles E. Mullins, Michael R. Nihill, Saad Al Yousef, Saud Al Oufy, Moheeb Abdullah, Mohamed R. Al Fagih, and William Sawyer

MISCELLANEOUS

222

Role of Anemia in the Pathogenesis of Left Ventricular Hypertrophy in End-Stage Renal Failure Jonathan S. Silberberg, Deric P. Rahal, D. Robert Patton,

and Allan D. Sniderman

BRIEF REPORTS

225

Intermittent, Dose-Related Fluctuations of Pain and ST Elevation During Infusion of Recombinant Tissue Plasminogen Activator During Acute Myocardial Infarction

Gabriel I. Barbash, Hanoch Hod, Shemuel Rath, Hilton I. Miller, Arie Roth, Yedahel Har-Zahav, Michaela Modan, Zeev Rotstein, Alex Batler, Ariela Zivelin, Joseph Charnilass, Elieser Kaplinsky, Shlomo Laniado, Babeth Rabinowitz, and Uri Seligsohn

229

Effect of Combined Administration of Saruplase and Single-Chain Alteplase on Coronary Recanalization in Acute Myocardial Infarction
Bernardino Tranchesi, Jr., G. Bellotti, Dalton Fisher

Chamone, and Marc Verstraete

232

Correlation of Ischemic ST-Segment Depression on the Resting Electrocardiogram with New Cardiac Events in 1,106 Patients Over 62 Years of Age Wilbert S. Aronow

233

Atenolol in Children with Supraventricular Tachycardia Donald L. Trippel and Paul C. Gillette

236

Increase in Plasma Atrial Natriuretic Factor During Ventriculoatrial Pacing

Kenneth A. Ellenbogen, Ketan Kapadia, Mary Walsh, and Pramod K. Mohanty

Blood Pressure Among Asian-Americans Living in Northern California

Aaron Angel, Mary Anne Armstrong, and Arthur L. Klatsky

240

Left Ventricular Intrinsic Contractility in Pure Rheumatic Mitral Stenosis

Jagdish C. Mohan, Mohammed Khalilullah, and Ramesh Arora

243

Detection of Left Atrial Thrombi by Two-Dimensional Echocardiography and Surgical Correlation in 148 Patients with Mitral Valve Disease

Ramesh C. Bansal, J. Thomas Heywood, Patricia M. Applegate, and Kenneth R. Jutzy

246

Oximetric Quantitation of Intracardiac Left-to-Right Shunting: Limitations of the Qp/Qs Ratio

Ricardo G. Cigarroa, Richard A. Lange, and L. David Hillis

247

Noninvasive Assessment of Peripheral Vascular Disease by Color Flow Doppler/Two-Dimensional Ultrasound

Kenneth Rosenfield, Susan M. Kelly, Constance D. Fields, John O. Pastore, Robert Weinstein, Paul Palefski, R. Eugene Langevin, Jr., Bernard D. Kosowsky, Syed Razvi, and Jeffrey M. Isner

CASE REPORT

252

Two-Dimensional Echocardiography and Doppler Findings in Cerebral Arteriovenous Malformation Thomas J. Starc, Ehud Krongrad, and Fredrick Z. Bierman

LETTERS

256

Coronary Morphology in Unstable Angina Mortality for Women After Acute Myocardial Infarction

INSTRUCTIONS TO AUTHORS on page 255

JULY 18, 1989, VOL. 64, NO. 4 A Symposium: Myocardial Infarction — Direction for the 1990s

AUGUST 1, 1989, VOL. 64, NO. 5

CORONARY ARTERY DISEASE

257

Angiographic Characteristics of the Infarct-Related Coronary Artery in Patients with Angina Pectoris After Myocardial Infarction

Richard A. Lange, Ricardo G. Cigarroa, and L. David Hillis

261

Quantitative Assessment of Coronary Arterial Diameter Before and After Coronary Artery Bypass Grafting Ricardo G. Cigarroa, Richard A. Lange, and L. David Hillis

264

Lack of Evidence for Alpha-Adrenergic Receptor-Mediated Mechanisms in the Genesis of Ischemia in Syndrome X

Alfredo R. Galassi, Juan Carlos Kaski, Giuseppe Pupita, Margarita Vejar, Filippo Crea, and Attilio Maseri

270

Use of Technetium-99m Isonitrile (RP-30A) in Assessing Left Ventricular Perfusion and Function at Rest and During Exercise in Coronary Artery Disease, and Comparison with Coronary Arteriography and Exercise Thallium-201 SPECT Imaging
Abdulmassih S. Iskandrian, Jaekyeong Heo, Barbara Kong,

Edward Lyons, and Sally Marsch

276

Usefulness of the Severity and Extent of Reversible Perfusion Defects During Thallium-Dipyridamole Imaging for Cardiac Risk Assessment Before Noncardiac Surgery

Jean Lette, David Waters, Jacques Lapointe, André Gagnon, Michel Picard, Michel Cerino, and Marcel Kerouac

282

Exercise Thallium-201 Scintigraphy and Prognosis in Typical Angina Pectoris and Negative Exercise Electrocardiography

C. Noel Bairey, Alan Rozanski, Jamshid Maddahi, Kenneth J. Resser, and Daniel S. Berman

289

Identifying Patients at High Risk for Restenosis After Percutaneous Transkuminal Coronary Angioplasty for Unstable Angina Pectoris

David A. Halon, Amnon Merdler, Arie Shefer, Moshe Y. Flugelman, and Basil S. Lewis

294

Usefulness of Fish Oil Supplements in Preventing Clinical Evidence of Restenosis After Percutaneous Transluminal Coronary Angioplasty

Mark Robert Milner, Robert Anthony Gallino, Ann Leffingwell, Augusto Descalzi Pichard, Sharon Brooks-Robinson, Joel Rosenberg, Thomas Little, and Joseph Lindsay, Jr.

300

Painful Versus Silent Myocardial Ischemia During Leg and Arm Exercise Testing in Stable Angina Pectoris Efraim Ben-Ari, Enrique Z. Fisman, Amos Pines, Robert Shiner, Morton Tavel, and Jan J. Kellermann

304

International Application of a New Probability Algorithm for the Diagnosis of Coronary Artery Disease

Robert Detrano, Andras Janosi, Walter Steinbrunn, Matthias Pfisterer, Johann-Jakob Schmid, Sarbjit Sandhu, Kern H. Guppy, Stella Lee, and Victor Froelicher

CONTENTS INDEX

Significance of Nitroglycerin-Induced Hypotension with Inferior Wall Acute Myocardial Infarction

James J. Ferguson, Daniel J. Diver, Marjorie Boldt, and Richard C. Pasternak

Characteristics Associated with Early (\leq 3 Months) Versus Late (>3 Months to \leq 3 Years) Mortality After **Acute Myocardial Infarction**

Luc A. Piérard, Jean-Paul Chapelle, Adelin Albert, Christophe Dubois, and Henri E. Kulbertus

Prognostic Significance of ST Potentials Determined by Body Surface Mapping in Inferior Wall Acute Myocardial Infarction

Anthony J. Bell, Michael G. Loughhead, Stephen J. Walker, and David Kilpatrick

Qualitative and Quantitative Comparison of Amounts of Narrowing by Atherosclerotic Plaques in the Major Epicardial Coronary Arteries at Necropsy in Sudden **Coronary Death, Transmural Acute Myocardial** Infarction, Transmural Healed Myocardial Infarction and Unstable Angina Pectoris

William C. Roberts

ARRHYTHMIAS AND CONDUCTION DISTURBANCES

Conversion of Sustained into Nonsustained Ventricular Tachycardia During Therapy Assessment by Programmed Ventricular Stimulation: Criterion for a Positive Drug Effect?

Wolfgang Schoels, Johannes Brachmann, Claus Schmitt, Bernd Waldecker, and Wolfgang Kuebler

Effectiveness of Intravenous Propatenone for Conversion of Atrial Fibrillation and Flutter of Recent Oreset

Leopoldo Bianconi, Roberto Boccadamo, Augusto Pappalardo, Carlo Gentili, and Michele Pistolese

Random and Nonrandom Behavior of Symptomatic **Paroxysmal Atrial Fibrillation**

G. Stephen Greer, William E. Wilkinson, Elizabeth A. McCarthy, and Edward L.C. Pritchett

SYSTEMIC HYPERTENSION

Comparison of the Effects of Pindolol and Propranolol on Exercise Performance in Young Men with Systemic Hypertension

Nicholaus B. Martin, Craig E. Broeder, Evan L. Thomas, Kathleen C. Wambsgans, Kathy D. Scruggs, Jacquelyn K. Jesek, Zandrie Hofman, and Jack H. Wilmore

348

Effect of Exercise Training in 60- to 69-Year-Old Persons with Essential Hypertension

James M. Hagberg, Scott J. Montain, Wade H. Martin, III, and Ali A. Ehsani

CONGENITAL HEART DISEASE

Doppler Evaluation of Homograft Valved Conduits in Children

Jon N. Meliones, A. Rebecca Snider, Edward L. Bove, Gerald A. Serwer, Jane Peters, Samuel J. Lacina, Michael S. Florentine, and Amnon Rosenthal

MISCELLANEOUS

Association of Coronary Artery Disease in Cardiac Transplant Recipients with Cytomegalovirus Infection Ken McDonald, Thomas S. Rector, Elizabeth A. Braunlin. Spencer H. Kubo, and Maria Theresa Olivari

Early Image Acquisition After Administration of Indium-111 Platelets in Clinically Suspected Deep Venous Thrombosis

David C. Farlow, Michael D. Ezekowitz, Sunder Ram Rao. Cielo Martinez, Don F. Denny, Steven S. Morse, Janice S. Decho, Frans Wackers, and Edward Strauss

Correlation of Intraabdominal Fat Accumulation and Left Ventricular Performance in Obesity

Tadahisa Nakajima, Shigenori Fujioka, Katsuto Tokunaga, Yuji Matsuzawa, and Seiichiro Tarui

METHODS

Improved Sensitivity of Color Doppler by SH U 454 Harald Becher and Reinhard Schlief

EDITORIAL

The Clinical Utility of Body Surface Potential Mapping in Coronary Artery Disease

Terrence J. Montague and Francis X. Witkowski

BRIEF REPORTS

Usefulness of Oral Dipyridamole Digital **Echocardiography for Detecting Coronary Artery**

Jerald L. Cohen, Trevor O. Greene, John R. Alston, Samuel D. Wilchfort, and Chung S. Kim

Effect of Aspirin on Myocardial Ischemia Cheryl Mahony

Acute Hemodynamic Effects of Adibendan, a New Phosphodiesterase Inhibitor, for Severe Congestive Heart Failure

Wolfram Voelker, Manfred Mauser, Melitta Preisack, and Karl R. Karsch

392

Scanning Electron Microscopy of Operative Excised Severely Regurgitant Floppy Mitral Valves

Paul D. Stein, Chin-Hua Wang, Jeanne M. Riddle, Hani N. Sabbah, Donald J. Magilligan, Jr., and Earl T. Hawkins

395

Correlation of Distance from Subaortic Membrane to Base of the Right Aortic Valve Cusp and the Development of Aortic Regurgitation in Mild Discrete Subaortic Stenosis

Michael Motro, Adam Schneeweiss, Avram Shem-Tov, Patricia Benjamin, Elieser Kaplinsky, and Julius Hegesh

397

Percutaneous Transluminal Balloon Angioplasty for Obstruction of the Suprahepatic Inferior Vena Cava and Cavo-Atrial Graft Stenosis

Vishva Dev, Upendra Kaul, Peeyush Jain, Sudhakar Reddy, Sanjiv Sharma, Girish Pandey, and Meera Rajani

399

Rapid T-Wave Normalization After Balloon Pulmonary Valvuloplasty in Children

Thomas R. Lloyd and Richard L. Donnerstein

401

Response to Dynamic Exercise of the Orthotopically Transplanted Human Heart in Men Immunosuppressed with Cyclosporine

J.V. Nixon, Henry Rosenburg, Donald Romhilt, James A. Thompson, Andrea Hastillo, and Michael L. Hess

403

Circadian Distribution in Fatal Pulmonary Thromboembolism

Domenico Colantonio, Raffaele Casale, Benjamin P. Abruzzo, Giuliana Lorenzetti, and Paolo Pasqualetti

405

Nephrotoxicity of a Nonionic (lopamidol) Versus an Ionic (Diatrizoate) Contrast Agent in the Patient After Cardiac Transplant with Moderate Cyclosporine-Induced Renal Insufficiency

Bart G. Denys, P. Sudhakar Reddy, and Barry F. Uretsky

406

Utility of Precordial, Epicardial and Transesophageal Two-Dimensional Echocardiography in the Detection of Intracardiac Foreign Bodies

William C. Reeves, Assad Movahed, W. Randolph Chitwood, Mark Williams, and Stanley R. Jolly, with the technical assistance of Joseph C. Jordan, Sandra Webb and Kelly Challinor

CASE REPORT

410

Extensive Multifocal Myocardial Infarcts from Cloth Emboli After Replacement of Mitral and Aortic Valves with Cloth-Covered, Caged-Ball Prostheses

Allen L. Dollar, Marie-Lydie Pierre-Louis, Charles L. McIntosh, and William C. Roberts

ABSTRACTS

413

American Academy of Pediatrics: Cardiology Abstracts

LETTERS

424

Denervation of the Heart in Congenital Long QT and Deafness

On the Identity of "X" in So-Called Syndrome X

Treadmill Exercise Testing Versus Holter Monitoring for Detecting Myocardial Ischemia

INSTRUCTIONS TO AUTHORS on page 288, 384

AUGUST 2, 1989, VOL. 64, NO. 6 A Symposium: The George E. Burch Festschrift

AUGUST 15, 1989, VOL. 64, NO. 7 A Symposium: Pharmacologic and Therapeutic Aspects of Urapidil

SEPTEMBER 1, 1989, VOL. 64, NO. 8

CORCNARY ARTERY DISEASE

427

Type A Behavior and Survival: A Follow-Up Study of 1,467 Patients with Coronary Artery Disease

John C. Barefoot, Bercedis L. Peterson, Frank E. Harrell, Mark A. Hlatky, David B. Pryor, Thomas L. Haney, James A. Blumenthal, Ilene C. Siegler, and Redford B. Williams, Jr.

433

Comparison of Nifedipine, Propranolol and Isosorbide Dinitrate on Angiographic Progression and Regression of Coronary Arterial Narrowings in Angina Pectoris Alessandro Loaldi, Alvise Polese, Piero Montorsi,

Nicoletta De Cesare, Franco Fabbiocchi, Paolo Ravagnani, and Maurizio D. Guazzi

440

Left Ventricular Dysfunction in Acute Myocardial Infarction Due to Isolated Left Circumflex Coronary Artery Stenosis

Florence H. Sheehan for the Principal Investigators

CONTENTS INDEX

448

Single-Bolus Injection of Recombinant Tissue-Type Plasminogen Activator in Acute Myocardial Infarction Ulrich Tebbe, Paul Tanswell, Erhard Seifried, Werner Feuerer, Karl-Heinz Scholz, and Karlheinz S. Herrmann

454

A New Epidemiologic Classification System for Interim Myocardial Infarction from Serial Electrocardiographic Changes

Richard S. Crow, Ronald J. Prineas, David R. Jacobs, Jr., and Henry Blackburn

462

Comparison by Quantitative Angiographic Assessment of Coronary Stenoses of One View Showing the Severest Narrowing to Two Orthogonal Views Jacques Lesperance, Gilles Hudon, Carl W. White, Jean Laurier, and David Waters

Acc

A Simplified Approach for Evaluating Multiple Test Outcomes and Multiple Disease States in Relation to the Exercise Thallium-201 Stress Test in Suspected Coronary Artery Disease

Stewart G. Pollock, Denny D. Watson, Robert S. Gibson, George A. Beller, and Sanjiv Kaul

471

Clinical Course and Long-Term Prognosis of Spontaneous Coronary Artery Dissection Samuel J. DeMaio, Jr., Susan H. Kinsella, and Mark E. Silverman

ARRHYTHMIAS AND CONDUCTION DISTURBANCES

475

Effect of Selective Intracoronary Antiarrhythmic Drug Administration in Sustained Ventricular Tachycardia Peter L. Friedman, Andrew P. Selwyn, Elazer Edelman, and Paul J. Wang

481

Physiologic Relation Between Cardiac Cycle and QT Duration in Healthy Volunteers

Brigitte Lecocq, Vincent Lecocq, and Patrice Jaillon

497

Stress and Pharmacologic Tests as Methods to Identify Patients with Wolff-Parkinson-White Syndrome at Risk of Sudden Death

Fiorenzo Gaita, Carla Giustetto, Riccardo Riccardi, Lucia Mangiardi, and Antonio Brusca

VALVULAR HEART DISEASE

491

Abrupt Homeostatic Responses to Transient Intracardiac Occlusion During Balloon Valvuloplasty
José Suárez de Lezo, Pedro Montilla, Manuel Pan, Miguel Romero, Manuel Sancho, Joaquin Ruiz de Castroviejo, Inmaculada Tejero, José Arizón, and José Luis Carrasco, with the technical assistance of Ana Rejano and Carlos Martinez

CARDIOMYOPATHY

408

Significance of Positive or Negative Thallium-201 Scintigraphy in Hypertrophic Cardiomyopathy Thomas W. von Dohlen, L. Michael Prisant, and Martin J. Frank

504

Correlation Between Histomorphometric Findings on Endomyocardial Biopsy and Clinical Findings in Idiopathic Dilated Cardiomyopathy

Piero Tanganelli, Andrea Di Lenarda, Giorgio Bianciardi, Alessandro Salvi, Furio Silvestri, Luisa Mestroni, and Fulvio Camerini

MISCELLANEOUS

Mariane Spitzer and June Robins

507

Two-Dimensional Echocardiographic Aortic Root
Dimensions in Normal Children and Adults
Mary J. Roman, Richard B. Devereux, Randi Kramer-Fox,
and John O'Loughlin, with the technical assistance of

Meximal Coronary Vasodilator Capacity of Orthotopic Heart Transplants in Patients With and Without Rejection

Alain Nitenberg, Oscar Tavolaro, Daniel Loisance, Jean-Marc Foult, Luc Hittinger, Eduardo Aptecar, and Jean-Paul Cachera

519

Effect of Weight Loss on Coagulation Factors VII and X John A. Baron, Jim Mann, and Thérèse Stukel

523

Mechanism of Altered Pattern of Left Ventricular Filling With Aging in Subjects Without Cardiac Disease Thomas R. Downes, Abdel-Mohsen Norneir, Karen M. Smith, Kathy P. Stewart, and William C. Little

520

Doppler Echocardiography and Ultrafast Cine
Computed Tomography During Dynamic Exercise in
Chronic Parenchymal Pulmonary Disease
Ronald B. Himelman, Joseph A. Abbott, Edmond Lee, Nelso

Ronald B. Himelman, Joseph A. Abbott, Edmond Lee, Nelson B. Schiller, Nathan C. Dean, and Michael S. Stulbarg

EDITORIAL

534

Transcoronary Techniques and Cardiac ArrhythmiasPedro Brugada

BRIEF REPORTS

536

Comparison of Time- and Frequency Domain-Based Measures of Cardiac Parasympathetic Activity in Hotter Recordings After Myocardial Infarction J. Thomas Bigger, Jr., Paul Albrecht, Richard C. Steinman, Linda M. Rolnitzky, Joseph L. Fleiss, and Richard J. Cohen

Safety of Percutaneous Coronary Atherectomy with **Deep Arterial Resection**

Kirk N. Garratt, Urs P. Kaufmann, William D. Edwards, Ronald E. Vlietstra, and David R. Holmes, Jr.

Prognosis in Peripartum Cardiomyopathy

Antonio Carvalho, Anselmo Brandao, Eulogio E. Martinez, Dimitrios Alexopoulos, Valter C. Lima, Jose L. Andrade, and John A. Ambrose

Hemodynamic Effects of High Dose Naloxone in **Congestive Heart Failure**

L. Allen Kindman and Michael B. Fowler

CASE REPORTS

Prolonged Ventricular Fibrillation-Salvage Using a New Percutaneous Cardiopulmonary Support System Padraig O'Neill, Teresa Menendez, Robert Hust, Jimmy Howell, Rafael Espada, and Antonio Pacifico

Myxoma Attached Solely to the Tricuspid Valve David J. Cole, William G. Hendren, James D. Sink, and Paul H. D'Amato

547

Prenatal Diagnosis and Circulatory Characteristics in Tetralogy of Fallot with Absent Pulmonary Valve Jean-Claude Fouron, David J. Sahn, Robert Bender, Richard Block, Howard Schneider, Patricia Fromberger, Sandy Hagen-Ansert, and Pat O. Daily

Primary Aortic Sarcoma Mimicking Aortic Dissection David S. Borislow, Walter L. Floyd, and David C. Sane

FROM THE EDITOR

Atherosclerotic Risk Factors-Are There Ten Or Is There Only One?

William C. Roberts

INSTRUCTIONS TO AUTHORS on page A69

SEPTEMBER 5, 1989, VOL. 64, NO. 9 A Symposium: Cardiovascular Diagnosis – for Imaging in the 1990s

SEPTEMBER 15, 1989, VOL. 64, NO. 10

CORONARY ARTERY DISEASE

Coronary Risk Associated with Age and Sex of Parental Heart Disease in the Framingham Study Joellen M. Schildkraut, Richard H. Myers,

L. Adrienne Cupples, Dan K. Kiely, and William B. Kannel

Usefulness of Percutaneous Transluminal Coronary Angioplasty in Alleviating Silent Myocardial Ischemia in Patients with Absent or Minimal Painful Myocardial

Gregg W. Stone, Susan Spaude, Robert W. Ligon, and Geoffrey O. Hartzler

Effects of Sublingual Mitrate in Patients Receiving Sustained Therapy of Isosorbide Dinitrate for Coronary **Artery Disease**

Hidetoshi Naito, Yasuo Matsuda, Kohtaro Shiomi, Tadao Yorozu, Toshiaki Maeda, Hirofumi Lee, Kohzaburo Seki, and Hiroya Nakashima

569

Sustained Effect of and Lack of Development of Tolerance to Controlled-Release Isosorbide-5-Mononitrate in Chronic Stable Angina Pectoris Gerald Wisenberg, Cathy Roks, Peter Nichol, and Michele D. Goddard

577

Effects of Occlusion of the Left Anterior Descending Coronary Artery During Angioplasty on Right-Sided Cardiac Pressures and Electrocardiographic Changes Shlomo Charlap, Nancy Schulhoff, Subbarao Mylavarapu, Alvin Greengart, Joseph Gelbfish, Linda Budzilowicz. Gerald Hollander, Edgar Lichstein, and Jacob Shani

Tolerance with Low Dose Intravenous Nitroglycerin Therapy in Acute Myocardial Infarction Bodh I. Jugdutt and J. Wayne Warnica

Influence of Thrombolytic Treatment Followed by Full Dose Anticoagulation on the Frequency of Left Ventricular Thrombi in Acute Myocardial Infarction Gabriele Lupi, Stefano Domenicucci, Francesco Chiarella, Paolo Bellotti, and Carlo Vecchio

ARRHYTHMIAS AND CONDUCTION DISTURBANCES

Prevalence of Silent Myocardial Ischemia in Survivors of Cardiac Arrest

Murray P. Whitaker and David S. Sheps

Nonsustained Ventricular Tachycardia Arising from the Right Ventricular Outflow Tract Alec H. Ritchie, Charles R. Kerr, Anzhen Qi, and

John A. Yeung-Lai-Wah

Intravenous Amiodarone for the Rapid Treatment of Life-Threatening Ventricular Arrhythmias in Critically III Patients with Coronary Artery Disease

Robert P. Ochi, Irvin F. Goldenberg, Adrian Almquist, Marc Pritzker, Simon Milstein, Wes Pedersen, Fredarick L. Gobel, and David G. Benditt

SYSTEMIC HYPERTENSION

Usefulness of Twenty-Four-Hour Blood Pressure Patterns and Response to Short-Term Sodium Restriction in Normotensive Subjects in Detecting a Predisposition to Systemic Arterial Hypertension Pietro Cugini, Daniele Danese, Paola Battisti, Loredana Di Palma, Giuseppe Leone, and Terukazu Kawasaki

CONGESTIVE HEART FAILURE

Relation Between Plasma Norepinephrine and Response to Medical Therapy in Men with Congestive Heart Failure Secondary to Coronary Artery Disease or Idiopathic Dilated Cardiomyopathy Walter Kao, Mihai Gheorghiade, Veronica Hall, and

Sidney Goldstein

VALVULAR HEART DISEASE

Influence of Transmitral Filling Dynamics on Continuous-Wave Doppler Assessment of Aortic Regurgitation by Half-Time Methods

Jean-Louis Vanoverschelde, Annie R. Taymans-Robert, Daniel A. Raphaël, and Jacques R. Cosyns

Combined Percutaneous Mitral and Aortic Balloon Valvuloplasty

Alfonso Medina, Armando Bethencourt, Ignacio Coello, Enrique Hernandez, Javier Goicolea, Eva Laraudogoitia, Francisco Melián, Francisco Jimenez, Antonio Drumond, and Eduardo Olalla

CONGENITAL HEART DISEASE

Continuous Spectral Analysis of Heart Murmurs for **Evaluating Stenotic Cardiac Lesions** Richard L. Donnerstein

MISCELLANEOUS

Lovastatin Therapy for Hypercholesterolemia in **Cardiac Transplant Recipients**

Paul C. Kuo, James M. Kirshenbaum, John Gordon, Glenn Laffel, Pia Young, Verdi J. DiSesa, Gilbert H. Mudge, Jr., and Douglas E. Vaughan

Influence of Beta Blockade on Exercise Capacity and Heart Rate Response After Human Orthotopic and Heterotopic Cardiac Transplantation

Salim Yusuf, Stergios Theodoropoulos, Nazir Dhalla, Christopher J. Mathias, Koon K. Teo, Janet Wittes, and Magdi Yacoub

Exercise Capacity During the First Year After Cardiac Transplantation

Arthur J. Labovitz, Ami M. Drimmer, Lawrence R. McBride, D. Glenn Pennington, Vallee L. Willman, and Leslie W. Miller

Influence of Age and Sex on Left Ventricular Filling at Rest in Subjects Without Clinical Cardiac Disease Lawrence J. Sinak and Ian P. Clements

A Brief Self-Administered Questionnaire to Determine Functional Capacity (The Duke Activity Status Index) Mark A. Hlatky, Robin E. Boineau, Michael B. Higginbotham, Kerry L. Lee, Daniel B. Mark, Robert M. Califf. Frederick R. Cobb, and David B. Pryor

METHODS

Noninvasive Measurement of Left Ventricular Filling Pressures by Means of Transmitral Pulsed Doppler Ultrasound

Thomas V. Störk, Reinhold M. Müller, Günter J. Piske, Christoph O. Ewert, and Hans Hochrein

Factors Influencing Accuracy in Left Ventricular Volume Determination

Florence H. Sheehan and Suzanne Mitten

BRIEF REPORTS

High Incidence of Acute Coronary Occlusions Complicating Percutaneous Transluminal Coronary Angioplasty for Angina Pectoris

Elliot Chesler, Charles Gornick, Gordon Pierpont, and E. Kenneth Weir

Restenosis After Excellent Angiographic Angioplasty Result for Chronic Total Coronary Artery Occlusion Implications for Newer Percutaneous Revascularization

Stephen G. Ellis, Richard E. Shaw, Spencer B. King, III, Richard K. Myler, and Eric J. Topol

Assessment by Doppler Color Flow Mapping of Ventricular Septal Defect After Acute Myocardial Infarction

Gerald Maurer, Lawrence S.C. Czer, Prediman K. Shah, and Aurelio Chaux

Effect of Propafenone Hydrochloride on Lymphocyte Membrane Beta, Adrenoceptors in Ventricular

Milou D. Drici, Valérie Sbirrazzuoli, Rodolphe Garraffo, Alain Wajman, Philippe Morand, and Philippe Lapalus

Increases in Atrial Natriuretic Peptide After Delivery and in the Puerperium

Daniel Duprez, Jean-Marc Kaufman, Yan-Ru Liu, Josée Van Hoecke, Yves Van Trappen, Michel Thiery, Alex Vermeulen, and Denis Clement

Noninvasive Evaluation of Cardiac Structure and **Function in Alpinists**

Thrassivulos K. Kiratjoglu, Konstantinos D. Gemitzis, and Charalampos P. Kougioumtzidis

CASE REPORTS

Macroreentrant Ventricular Tachycardia and Coronary Artery Disease in Cerebrotendinous Xanthomatosis

Peng-Sheng Chen, R. Peter Fleck, Constance M. Calisi, Joseph A. Kozina, and Gregory K. Feld

Acute Myocardial Infarction Complicating Recanalization of Aortocoronary Bypass Grafts with **Urokinase Therapy**

Louis S. McKeever, Joseph R. Hartmann, Vincent J. Bufalino, Joseph C. Marek, Alan S. Brown, Mark J. Goodwin, Michael A. Colandrea, Nicholas J. Stamato, John M. Cahill, Michael J. O'Donnell, Firouz Amirparviz, and Elaine L. Enger

Adenosine in Altering Short- and Long-Term Treatment of Supraventricular Tachycardia in Infants Anthony F. Rossi and David A. Burton

687

Operative Correction of Subcarinal Left Pulmonary Artery Originating from the Right Pulmonary Artery Robert N. Vincent, George Armstrong, Maryanne L. Dokler, and Willis H. Williams

689

Evaluation of Coronary Arterial Fistula by Color-Coded Doppler Echocardiography Kai-chiu Lau and Yin-ming Ng

691

Use of Venous Contrast Echocardiography for **Diagnosis of Cardiac Tamponade** Alexander A. Stratienko, Stewart G. Pollock, Mark W. Keller, and Ian J. Sarembock

FROM THE EDITOR

Lipid-Lowering Therapy After an Atherosclerotic Event William C. Roberts

LETTERS

Standard Electrocardiographic Extremity Leads Cardiac Denervation and Long QT Interval

INSTRUCTIONS TO AUTHORS on page A105

SEPTEMBER 19, 1989, VOL. 64, NO. 11 A Symposium: Cardiovascular Therapy — the Next Step

OCTOBER 1, 1989, VOL. 64, NO. 12

CORONARY ARTERY DISEASE

Usefulness of Color Doppler Flow Imaging to Distinguish Ventricular Septal Defect from Acute Mitral Regurgitation Complicating Acute Myocardial

Michael R. Harrison, Blair MacPhail, John C. Gurley, Edward A. Harlamert, Joseph E. Steinmetz, Mikel D. Smith, and Anthony N. DeMaria

702

Limitations of a Conventional Logistic Regression Model Based on Left Ventricular Ejection Fraction in Predicting Coronary Events After Myocardial Infarctio Jeffrey W. Work, John G. Ferguson, and George A. Diamond

Decision Analysis Concerning the Application of Echocardiography to the Diagnosis and Treatment of Mural Thrombi After Anterior Wall Acute Myocardial Infarction

William S. Weintraub and Hisham A. Ba'albaki

Effects of Diltiazem Alone or with Isosorbide Dinitrate or with Atenolol Both Acutely and Chronically for Stable Angina Pectoris

Hassan El-Tamimi, Graham J. Davies, Juan-Carlos Kaski, Margarita Veiar, Alfredo R. Galassi, and Attilio Maseri, with the technical assistance of Christine O'Sullivan and Trudy Lowe

Effect of a Modified, Well-Tolerated Niacin Regimen on Serum Total Cholesterol, High Density Lipoprotein Cholesterol and the Cholesterol to High Density Lipoprotein Ratio

James D. Alderman, Richard C. Pasternak, Frank M. Sacks, Harton S. Smith, E. Scott Monrad, and William Grossman

Usefulness of Esophageal Pill Electrode Atrial Pacing with Quantitative Two-Dimensional Echocardiography for Diagnosing Coronary Artery Disease Ray V. Matthews, Richard J. Haskell, Leonard E. Ginzton,

and Michael M. Laks

Weight Carrying Versus Handgrip Exercise Testing in Men with Coronary Artery Disease

Nancy A. Wilke, Lois M. Sheldahl, Scot G. Levandoski, Martin D. Hoffman, and Felix E. Tristani

ARRHYTHMIAS AND CONDUCTION DISTURBANCES

741

Electrode Pad Size, Transthoracic Impedance an Success of External Ventricular Defibrillation Gavin W.N. Dalzell, Stephen R. Cunningham, John Anderson, and A.A. Jennifer Adgey

SYSTEMIC HYPERTENSION

745

Improvement of Diastolic Function After Reversal of Left Ventricular Hypertrophy Induced by Long-Term Antihypertensive Treatment with Tertatolol

Bruno Trimarco, Nicola De Luca, Giovanni Rosiello, Bruno Ricciardelli, Sandro Betocchi, Pasquale Perrone Filardi, Massimo Raponi, and Mario Condorelli

700

Importance of Overweight in Studies of Left Ventricular Hypertrophy and Diastolic Function in Mild Systemic Hypertension

Brent Egan, M. Andrew Fitzpatrick, Jack Juni, Andrew J. Buda, and Andrew Zweifler

CONGENITAL HEART DISEASE

756

Usefulness of the Doppler Mean Gradient in Evaluation of Children with Aortic Valve Stenosis and Comparison to Gradient at Catheterization

A. Resai Bengur, A. Rebecca Snider, Gerald A. Serwer, Jane Peters, and Amnon Rosenthal

762

Predictors of Rhythm Disturbances and Subsequent Morbidity After the Fontan Operation

Howard S. Weber, William E. Hellenbrand, Charles S. Kleinman, Robin A. Perlmutter, and Lynda E. Rosenfeld

769

Occurrence of Congenital Heart Defects in Siblings of Patients with Univentricular Heart and Tricuspid Atresia

Thomas J. Weigel, David J. Driscoll, and Virginia V. Michels

MISCELLANEOUS

772

Differing Responses in Right and Left Ventricular Filling, Loading and Volumes During Positive End-Expiratory Pressure

Douglas S. Schulman, James W. Biondi, Richard A. Matthay, Barry L. Zaret, and Robert Soufer

778

Quantitative Arteriographic Responses to Ergonovine Provocation in Subjects with Atypical Chest Pain Brian P. Kimball, Victor LiPreti, and Harold E. Aldridge

METHODS

783

Oxygen Consumption and Cardiac Output

Bighard A Longo Craggery | Debmar Peter | Wells

Richard A. Lange, Gregory J. Dehmer, Peter J. Wells, David A. Tate, Avanindra Jain, Eduardo D. Flores, Timothy C. Nichols, and L. David Hillis

787

Noninvasive Assessment of Central Circulatory Pressures by Analysis of Ear Densitographic Changes During the Valsalva Maneuver

Luciano Bernardi, Riccardo Saviolo, and David H. Spodick

792

Measurement of Cardiac Output Noninvasively During Surgery Using a New Continuous-Wave Doppler Esophageal Probe

Anil Kumar, Shinichi Minagoe, Duraiyah Thangathurai, Maged Mikhail, Dennis Novia, John F. Viljoen, Shahbudin H. Rahimtoola, and P. Anthony N. Chandraratna

BRIEF REPORTS

799

Importance of Early Recurrent Ischemia on One-Year Survival After Non-Q-Wave Acute Myocardial Infarction

William E. Boden, Robert S. Gibson, Robert E. Kleiger, Kenneth B. Schechtman, Robert J. Capone, David J. Schwartz, Robert Roberts, and the Diltiazem Reinfarction Study Research Group

801

Ambulatory Electrocardiographic Findings in Out-of-Hospital Cardiac Arrest Secondary to Coronary Artery Disease

Sergio J. Dubner, Sergio Pinski, Susana Palma, Benjamin Elencwajg, and Jorge E. Tronge

808

Evaluation of a Microprocessor-Controlled Sphygmomanometer for Recording Blood Pressure During Exercise

Sadamasa Ogasawara, S. Ben Freedman, Jai Ram, and David T. Kelly

809

Detection of Diastolic Atrioventricular Valvular Regurgitation by "M-Mode" Color Doppler Echocardiography

Veronica A. Covalesky, John Ross, Jr., Krishnaswamy Chandrasekaran, and Gary S. Mintz

811

Coronary Artery Disease in Patients 35 Years of Age or Older with Valvular Aortic Stenosis

Ronny Chobadi, Mordechai Wurzel, Igal Teplitsky, Hanoch Menkes, and Ido Tamari

812

Localization of a "Postreceptor" Defect in Human Dilated Cardiomyopathy

Michael Böhm, Peter Gierschik, Karl H. Jakobs, Petra Schnabel, Bernhard Kemkes, and Erland Erdmann

815

Nephrotoxicity of Nonionic Contrast Media After Cardiac Angiography

Charles P. Taliercio, Scott H. McCallister, David R. Holmes, Duane M. Ilstrup, and Panald E. Vlietstra

Differential Sensitivity of the RV₆:RV₅ Voltage Ratio by Pathogenesis of Left Ventricular Hypertrophy and Diagnostic Cutpoint

David H. Spodick and Hitoshi Koito

CASE REPORTS

820

Echocardiographic Detection of Pericardiocentesis-Induced Subepicardial and Intramyocardial Hematoma Jon N. Meliones, A. Rebecca Snider, Robert H. Beekman, A. Resai Bengur, and Michele A. Bogaards

822

Spontaneous Reversible Spasm in an Internal Mammary Artery Graft Causing Acute Myocardial Infarction

Gregg W. Stone and Geoffrey O. Hartzler

824

Acquired Coronary Artery-Left Ventricular Pseudoaneurysm Fistula After Myocardial Infarction Kenneth M.H. Lee, Augusto D. Pichard, and Joseph Lindsay, Jr.

825

Diffuse Coronary Vasospasm and Accelerated Atherosclerosis in a Transplanted Human Heart Thomas Little, John Macoviak, Pedro Villanueva, Walter E. Lawrenson, and Anantha Rao

929

Retroaortic Epicardial Course of the Left Circumflex Coronary Artery and Anteroaortic Intramyocardial (Ventricular Septum) Course of the Left Anterior Descending Coronary Artery: An Unusual Coronary Anomaly and a Proposed Classification Based on the Number of Coronary Ostia in the Aorta Allen L. Dollar and William C. Roberts

830

Fatal Azide-Induced Cardiomyopathy Presenting as Acute Myocardial Infarction

Kevin W. Judge and Needham E. Ward

LETTERS

833

Surgery for Expected Ventricular Tachycardia Nouns Versus Adjectives in Accounting

for Discordance

Diltiazem and Left Ventricular Mass Regression

Pulmonary Extraction of Atrial Natriuretic Factor in Humans

Rapid Enzyme Measurements in Patients with Suspected Acute Myocardial Infarction

Blockpnea as an Angina Equivalent

INSTRUCTIONS TO AUTHORS on page A82

OCTOBER 3, 1989, VOL. 64, NO. 13 A Symposium: Lipid Dynamics and Atherosclerosis

OCTOBER 15, 1989, VOL. 64, NO. 14

CORONARY ARTERY DISEASE

835

Influence of Beta-Adrenergic Blockade Defined by Time Series Analysis on Circadian Variation of Heart Rate and Ambulatory Myocardial Ischemia

Charles R. Lambert, Kevin Coy, Greg Imperi, and Carl J. Pepine

840

Urokinase Plus Heparin Versus Aspirin in Unstable Angina and Non-Q-Wave Myocardial Infarction

Theodore L. Schreiber, Gregory Macina, Ann McNulty, Paul Bunnell, Marie Kikel, David H. Miller, Richard B. Devereux, Richard Tenney, Michael Cowley, and Benjamin Zola

845

Risk of Adverse Outcome in Patients Admitted to the Coronary Care Unit with Suspected Unstable Angina Pectoris

lan Wilcox, S. Ben Freedman, Robyn J. McCredie, Grant S. Carter, David T. Kelly, and Phillip J. Harris

849

Hemodynamic and Echocardiographic Assessment of the Effects of Diltiazem During Transient Occlusion of the Left Anterior Descending Coronary Artery During Percutaneous Transluminal Coronary Angioplasty Morton J. Kern, Anthony Pearson, Robert Woodruff, Ubeydullah Deligonul, Michel Vandormael, and Arthur Labovitz

856

Effects of Left Ventricular Preload and Afterload on Ascending Aortic Blood Velocity and Acceleration in Coronary Artery Disease

John B. Bedotto, Eric J. Eichhorn, and Paul A. Grayburn

260

Positron Emission Tomography Using Fluorine-18 Deoxyglucose in Evaluation of Coronary Artery Bypass Grafting

Nagara Tamaki, Yoshiharu Yonekura, Keiji Yamashita, Hideo Saji, Yasuhiro Magata, Michio Senda, Yutaka Konishi, Kazuo Hirata, Toshihiko Ban, and Junji Konishi

900

Effects of High Resistance Training in Coronary Artery Disease

Linda E. Crozier Ghilarducci, Robert G. Holly, and Ezra A. Amsterdam

271

Quantitative Comparison of Thallium-201 Scintigraphy
Following Exercise and Dipyridamole
Shalendra Kumar Varma Danny D. Watson, and

Shalendra Kumar Varma, Denny D. Watson, and George A. Beller

878

Impact of Late Coronary Artery Reperfusion on Left Ventricular Function One Month After Acute Myocardial Infarction (Results from the ISAM Study) Rolf Schröder, Karl-Ludwig Neuhaus, Thomas Linderer, Thomas Brüggemann, Ulrich Tebbe, and Karl Wegscheider

CONTENTS INDEX

Hyperglycemia and Prognosis of Acute Myocardial Infarction in Patients Without Diabetes Mellitus

Giorgio Bellodi, Valeria Manicardi, Vincenzo Malavasi, Leonarda Veneri, Giustino Bernini, Paolo Bossini, Salvatore Distefano, Gabriele Magnanini, Luigi Muratori, Gianni Rossi, and Anna Zuarini

Long-Term Prognosis of Transient Acute Myocardial Ischemia at Rest

Silva Severi, Claudio Michelassi, Enrico Orsini, Paolo Marraccini, and Antonio L'Abbate

ARRHYTHMIAS AND CONDUCTION DISTURBANCES

Cardiorespiratory Response to Exercise in Congenital Complete Atrioventricular Block

Tony Reybrouck, Bavo Vanden Eynde, Monique Dumoulin, and Lucas G. Van der Hauwaert

Prevalence, Time Course and Malignancy of Ventricular Arrhythmia Dwing Spontaneous Ischemic **ST-Segment Depression**

Gioia Turitto, Egidio Zanchi, Angela Maddaluna, Adalberto Pellegrini, Anna Lisa Risa, and Pier Luigi Prati

MISCELLANEOUS

Effect of Blood Pressure and Afterload on Doppler Echocardiographic Measurements of Left Ventricular Systolic Function in Human Subjects

Michael R. Harrison, G. Dennis Clifton, Martin R. Berk, and Anthony N. DeMaria, with the technical assistance of Annette Cater and Donna Burns

Modes of Death and Types of Cardiac Disease in Opiate Addicts: Analysis of 168 Necropsy Cases Frederick A. Dressler and William C. Roberts

METHODS

Influence of Temporal Smoothing on Quantitation of Left Ventricular Function by Gated Blood Pool Scintigraphy

Robert O. Bonow, Stephen L. Bacharach, Cynthia Crawford-Green, and Michael V. Green

Computer-Based Implementation of the ST-Segment/ **Heart Rate Slope**

Peter M. Okin and Paul Kligfield

EDITORIALS

931

Interval Therapy to Avoid Nitrate Tolerance: Paradise Regained?

Jonathan Abrams

Doppler Measurements of Aortic Blood Flow Velocity and Acceleration: Load-independent Indexes of Left Ventricular Performance?

Julius M. Gardin

BRIEF REPORTS

Safety of Intraaortic Balloon Counterpulsation in Patients with Acute Myocardial Infarction Receiving Streptokinase Intravenously

Mark Goodwin, Joseph Hartmann, Louis McKeever, Vincent Bufalino, Joseph Marek, Alan Brown, Michael Colandrea, Nicholas Stamato, John Cahill, Michael O'Donnell, Firouz Amirparviz, and Elaine Enger

Utility of Lead V₄R in Exercise Testing for Detection of Coronary Artery Disease

Lalit Chouhan, Ronald J. Krone, Andrew Keller, and Gail Eisenkramer

Hematocrit Changes After Uncomplicated Percutaneous Transluminal Coronary Angioplasty Steven J. Phillips, Mark Spector, Robert H. Zeff, James R. Skinner, Richard S. Toon, André Grignon, and

Chamnahn Kongtahworn

Percutaneous Coronary Laser Angioplasty Using Quick Short Bursts of Laser Thermal Energy for Chronic **Total Occlusions**

Ming C. Chan, Garrett Lee, Jing-Xuan Guo, Jie-Ming Mao, Feng-Rong Chen, Wei-Dong Yan, Dao-Yin Xie, Dan L. Rink, Agustin J. Argenal, and Dean T. Mason

Relation Between Ventricular Function and **Antiarrhythmic Responses to Sotalo!**

Steven N. Singh, Yiwang Chen, Andrew Cohen, Maria Obeid, Cynthia Tracy, Raymond L. Woosley, and Ross D. Fletcher

Effect of Tricuspid Regurgitation on the Reliability of the Thermodilution Cardiac Output Technique in **Congestive Heart Failure**

Michele A. Hamilton, Lynne W. Stevenson, Mary Woo, John S. Child, and Jan H. Tillisch

Inefficacy of Daily Single Bolus Dose Atrial Natriuretic **Factor in Chronic Congestive Heart Failure**

lan G. Crozier, A. Mark Richards, M. Gary Nicholls, Eric A. Espiner, and Hamid Ikram

Echocardiographic Detection and Clinical Significance of Left Atrial Vegetations in Active Infective Endocarditis

Jerome H. Kim, Alan Wiseman, Joseph Kisslo, and David T. Durack

Application of Flow Measurements by Magnetic Resonance Velocity Mapping to Congenital Heart

Simon Rees, David Firmin, Raad Mohiaddin, Richard Underwood, and Donald Longmore

Intracoronary Endothelin Induces Myocardial Ischemia by Small Vessel Constriction in the Dog

Simon W. Larkin, John G.Clarke, Bruce E. Keogh, Luis Araujo, Chris Rhodes, Graham J. Davies, Kenneth M. Taylor, and Attilio Maseri

FROM THE EDITOR

Clogged Arteries and Clogged Roads

William C. Roberts

INSTRUCTIONS TO AUTHORS on page A81

OCTOBER 17, 1989, VOL. 64, NO. 15 A Symposium: Clinical Experience with a Second Generation Calcium An(agonist — Nicardipine, a Vasoselective Agent

NOVEMBER 1, 1989, VOL. 64, NO. 16

CORONARY ARTERY DISEASE

Late Ventricular Dilatation in Survivors of Acute Myocardial Infarction

Niels Gadsbøll, Poul-Flemming Høilund-Carlsen, Jens Henrik Badsberg, Poul Stage, Jens Marving, Harald Lønborg-Jensen, and Birte Hiort Jensen

Emergency Percutaneous Cardiopulmonary Bypass Support in Cardiogenic Shock from Acute Myocardial Infarction

Fayaz A. Shawl, Michael J. Domanski, Tomas J. Hernandez, and Sudhakar Punia

Changes in Plasma Vitamin Levels in the First 48 Hours After Onset of Acute Myocardial Infarction

Robert Scragg, Rodney Jackson, Ian Holdaway, Gerald Woollard, and David Woollard

Oxygen Delivery, Oxygen Consumption and Hemoglobin-Oxygen Affinity in Acute Myocardial Infarction

Tsutomu Sumimoto, Yasuo Takayama, Toshiji Iwasaka, Tetsuro Sugiura, Masaharu Takeuchi, Noritaka Tarumi, Hirofumi Takashima, and Mitsuo Inada

Balloon Dilatation of Symptomatic Subacute Intimal Dissection Presenting as Restenosis

Howard D. Noveck, Lloyd W. Klein, Barry Kramer, Pierre Abi-Mansour, Joseph Rosenblum, and Michael Lesch

Prognostic Value of Atrial Pacing and Thallium-201 Scintigraphy in Patients with Stable Chest Pain Henry G. Stratmann, Alexander L. Mark, Kenneth E. Walter, and George A. Williams

CARDIOMYOPATHY

The Morphologic Spectrum of Dilated Cardiomyopathy and its Relation to Immune-Response Genes

Eloisa Arbustini, Antonello Gavazzi, Roberto Pozzi, Maurizia Grasso, Angela Pucci, Carlo Campana, Gabriella Graziano, Miryam Martinetti, Mariaclara Cuccia, Laura Salvaneschi, Luigi Martinelli, Carlo Montemartini, and Mario Vigano

CONGENITAL HEART DISEASE

Natural Course of Atrial Septal Aneurysm in Children and the Potential for Spontaneous Closure of **Associated Septal Defect**

Abraham Brand, Andre Keren, David Branski, Abraham Abrahamov, and Shlomo Stern

MISCELLANEOUS

Usefulness of Nuclear Magnetic Resonance Imaging for Evaluation of Pericardial Effusions, and Comparison with Two-Dimensional Echocardiography

Sharon L. Mulvagh, Roxann Rokey, G. Wesley Vick, III, and Donald L. Johnston

Prevalence and Significance of Left Ventricular Filling Abnormalities Determined by Doppler Echocardiography in Young Type I (Insulin-Dependent) Diabetic Patients

Catherine Paillole, Michel Dahan, Frédéric Paycha, Alain Cohen Solal, Philippe Passa, and René Gourgon

1017

Noninvasive Cardiac Risk Stratification of Diabetic and Nondiabetic Uremic Renal Allograft Candidates Using Dipyridamole—Thallium-201 Imaging and Radionuclide Ventriculography

Kenneth A. Brown, Jeffrey Rimmer, and Carl Haisch

1022

Comparison of Myocardial Washout Rate of Thallium-201 Between Rest, Dipyridamole With and Without Aminophylline, and Exercise States in Normal Subjects George T. O'Byrne, Erwin A. Rodrigues, Jamshid Maddahi, Kenneth F. Van Train, Christopher Wong, Kenneth Resser, John D. Friedman, and Daniel S. Berman

Preparticipation Echocardiographic Screening for Cardiovascular Disease in a Large, Predominantly Black Population of Collegiate Athletes Jannet F. Lewis, Barry J. Maron, James A. Diggs, Jane E. Spencer, Prafulla P. Mehrotra, and Charles L. Curry

EDITORIALS

1034

The Cardiac Catheter: Past, Present and Future Charles E. Rackley and Lowell F. Satler

Left Ventricular Diastolic Dysfunction Evaluated by Doppler Echocardiography in Patients with Diabetes Mellitus

Samuel Zoneraich

WRIEF REPORTS

Comparison of Exercise Test Responses Before and After Either Percutaneous Transluminal Coronary **Angioplasty or Coronary Artery Bypass Grafting** Paul Dubach, Kenneth G. Lehmann, and Victor F. Froelicher

Coronary Angioplasty Using the Probing Catheter in Combination with the Probe™ Balloon Wire Peter den Heijer, Rene B. van Dijk, Harry J.G.M. Crijns, Jos J. Groeskamp, and K.I. Lie

Immediate Improvement in Left Ventricular Function After Cardioversion of Atrial Flutter

James N. Karnegis, John J. Matoole, and Vincent G. Bjorling

Dynamics of Atrioventricular Nodal Conduction Ratios of Reverse Alternating Wenckebach Periods

Agustin Castellanos, Abdel J. Fuenmayor, Heikki Huikuri, Alberto Interian, Jr., Marilyn M. Cox, and Robert J. Myerburg

Morphologic Findings After Catheter Ablation of the Atrioventricular Junction

Wanda M. Lester, Anne M. Gillis, Nihad H. Ali-Ridha, and D. George Wyse

Rate-Responsive Ventricular Pacing in Pediatric

Joelle D. Miller, Ming-Lon Young, Dianne L. Atkins, and Grace S. Wolff

Differentiation of the Origin of Wide QRS Complexes by the Net Amplitude of the QRS in Lead V6 Mark S. Kremers, Peter Wells, William Black, and

Martha Solo

1057

Effect of Milrinone on Steady-State Digoxin Levels in Congestive Heart Failure

Kevin J. Ferrick, Aileen M. Ferrick, Steven A. Fein, and Joseph T. Doyle

Doppler-Echocardiographic Evaluation of Left Atrial Contribution to Left Ventricular Filling in Mitral Stenosis at Rest and During Exercise

Ted M. Parris, Michael McAllister, John J. Ross, and Gary S. Mintz

Frequence and Significance of Aortic Valve Thickening in Older Asymptomatic Patients and Its Relation to **Aortic Regurgitation**

Alberto Margonato, Domenico Cianflone, Mauro Carlino, Andrea Conversano, Cinzia Nitti, and Sergio Chierchia

Histopathologic and Electrophysiologic Correlations in Idiopathic Dilated Cardiomyopathy and Sustained Ventricular Tachyarrhythmia

Y.S. Archie Lo, Margaret Billingham, Reed A. Rowan, Hon-Chi Lee, L. Bing Liem, and Charles D. Swerdlow

Impact of Age on Echocardiographic Left Ventricular Mass in a Healthy Population (The Framingham Study) Andrew L. Dannenberg, Daniel Levy, and Robert J. Garrison

Mechanism Underlying Kussmaul's Sign in Chronic **Constrictive Pericarditis**

Theo E. Meyer, Pinhas Sareli, Richard H. Marcus, Wendy Pocock, Martin R. Berk, and Maurice McGregor

Left Ventricular Structure and Function in Professional Basketball Players

William Van Decker, Ioannis P. Panidis, Kevin Boyle, Ray Gonzales, and Alfred A. Bove

Growth Rate of Left Atrial Myxoma

Sonya Malekzadeh and William C. Roberts

1076

Effect of Estrogen Replacement Therapy on the ST-Segment Response to Postural and Hyperventilation

Peter Vaitkevicius, Jeanette G. Wright, and Jerome L. Fleg

CASE REPORTS

Association of Bidirectional Ventricular Tachycardia with Familial Sudden Death Syndrome

Todd J. Cohen, L. Bing Liem, and E. William Hancock

1080

Indium-111 Leukocyte Scintigraphic Detection of Mitral Valve Vegetations in Active Bacterial Endocarditis

Manuel D. Cerqueira, Arnold F. Jacobson, Miles Matsuda, and John R. Stratton

1082

Application of Abdominal and Transesophageal Echocardiography as a Guide for Insertion of Intraaortic Balioon Pump in Aortic Dissection

Satoshi Nakatani, Shintaro Beppu, Norio Tanaka, Motomi Andoh, Kunio Miyatake, and Yasuharu Nimura

FROM THE EDITOR

1084

The Echocardiographic Diseases

William C. Roberts

LETTERS

1085

Atrial Transport Function After Conversion of Atrial Fibrillation to Sinus Rhythm

INSTRUCTIONS TO AUTHORS on page 1086

NOVEMBER 7, 1989, VOL. 64, NO. 17 A Symposium: Pharmacology and Therapeutic Considerations of Amlopidine, a New 1,4-Dihydropyridine Calcium Antagonist

NOVEMBER 15, 1989, VOL. 64, NO. 18

CORONARY ARTERY DISEASE

1087

Clinical Characteristics and Outcome of Acute Myocardial Infarction in Patients with Initially Normal or Nonspecific Electrocardiograms (A Report from the Multicenter Chest Pain Study)

Gregory W. Rouan, Thomas H. Lee, E. Francis Cook, Donald A. Brand, Monica C. Weisberg, and Lee Goldman

Acute Myocardial Infarction in Cardiac Transplant

Shao Zhou Gao, John S. Schroeder, Sharon A. Hunt, Margaret E. Billingham, Hannah A. Valantine, and Edward B. Stinson

Comparative Effects of Theophylline and Isosorbide Dinitrate on Exercise Capacity in Stable Angina Pectoris and Their Mechanisms of Action

Filippo Crea, Giuseppe Pupita, Alfredo R. Galassi, Hassan El-Tamimi, Juan Carlos Kaski, Graham J. Davies, and Attilio

Effect of Intravenous Diltiazem on Myocardial Ischemia **Occurring During Percutaneous Transluminal Coronary**

Jan Piessens, Tomasz Brzostek, Francis Stammen, Johan Vanhaecke, Matty Vrolix, and Hilaire De Geest

Return to Work After Percutaneous Transluminal **Coronary Angioplasty**

Sheila T. Fitzgerald, Diane M. Becker, David D. Celentano, Robert Swank, and Jeffrey Brinker

Frequency and Significance of Early Postoperative Silent Myocardial Ischemia in Patients Having Peripheral Vascular Surgery
Pamela Ouyang, Gary Gerstenblith, William R. Furman,

Peter J. Golueke, and Sidney O. Gottlieb

1117

Comparison of Three Bayesian Methods to Estimate Posttest Probability in Patients Undergoing Exercise Stress Testing

Anthony P. Morise and Robert D. Duval

Upright Bicycle Exercise Echocardiography After Coronary Artery Bypass Grafting Stephen G. Sawada, Walter E. Judson, Thomas Ryan,

William F. Armstrong, and Harvey Feigenbaum

ARRHYTHMIAS AND CONDUCTION DISTURBANCES

1131

Role of intravenous isoproterenol in the Electrophysiologic induction of Atrioventricular Node Reentrant Tachycardia in Patients with Dual Atrioventricular Node Pathways Edward C. Huycke, Wen-Ter Lai, Ngai X. Nguyen,

Edmund C. Keung, and Ruev J. Sung

Correlation of Amiodarone Dosage, Heart Rate, QT Interval and Corneal Microdeposits with Serum Amiodarone and Desethylamiodarone Concentrations P. Timothy Pollak, Arjun D. Sharma, and

S. George Carruthers

Adverse Effects of Permanent Cardiac Internal **Defibrillator Patches on External Defibrillation** Joseph T. Walls, John C. Schuder, Jack J. Curtis, Hugh E. Stephenson Jr., Wayne C. McDaniel, and Greg C. Flaker

Sequelae of Nonsustained Polymorphic Ventricular Tachycardia Induced During Programmed Ventricular

William H. Kou, Michael de Buitleir, Alan H. Kadish, and Fred Morady

SYSTEMIC HYPERTENSION

Effects of Diuretic Therapy and Exercise-Related Arrhythmias in Systemic Hypertension

Vasilios Papademetriou, Aldo Notargiacomo, Donald Heine, Ross D. Fletcher, and Edward D. Freis

Effects of Atendiol on Left Ventricular Hypertrophy and Early Left Ventricular Function in Essential Hypertension

John W. Allen, Pamela J. Kaiser, and Anna Montenegro

CONGESTIVE HEART FAILURE

Decreased Spontaneous Heart Rate Variability in Congestive Heart Fallure

Giancarlo Casolo, Enrico Balli, Tamara Taddei, John Amuhasi, and Cesare Gori

VALVULAR HEART DISEASE

A Quantitative Comparison of Transesophageal and Epicardial Color Doppler Echocardiography in the Intraoperative Assessment of Mitral Regurgitation Jody P. Kleinman, Lawrence S.C. Czer, Michele DeRobertis, Aurelio Chaux, and Gerald Maurer

CARDIOMYOPATHY

Comparison of Doppler Indexes of Left Ventricular Diastolic Function with Simultaneous High Fidelity Left Atrial and Ventricular Pressures in Idiopathic Dilated Cardiomyopathy

Daniel David, Roberto M. Lang, Alex Neumann, Pinhas Sareli, Richard Marcus, Kirk T. Spencer, and Kenneth M. Borow

MISCELLANEOUS

1180

Reduced Exercise Capacity of Chronic Obstructive Pulmonary Disease Patients Exercising with Noseclip/Mouthpiece

Douglass A. Morrison, Michael Collins, James R. Stovall, and Geoffrey Friefeld, with the technical assistance of Charles Barbiere, Pat Carlson, Barbara Carpenter, Lois Clegg, Judy DeLong, Mary Ann Olsen, Patty Pantoja, Dan Powell, and Dianne Wolf

CARDIOVASCULAR PHARMACOLOGY

Superior Antiplatelet Action of Alternate Day Pulsed Dosing Versus Split Dose Administration of Aspirin Reinhard L. Lorenz, Barbara Boehlig, Waltraud M. Uedelhoven, and Peter C. Weber

EDITORIALS

Lessons to Be Learned from the Cardiac Arrhythmia Suppression Trial

Philip J. Podrid and Frank I. Marcus

Redefining True Ventricular Aneurysm

Davidson Howes Hamer and Joseph Lindsay, Jr.

BRIEF REPORTS

1195

Diagnosis of Left Ventricular Thrombi by Magnetic Resonance Imaging and Comparison with Angiocardiography, Computed Tomography and Echocardiography

Udo Sechtem, Peter Theissen, Walter Heindel, Kerstin Hungerberg, Hans-Josef Deutsch, Ruth Welslau, Julius M. Curtius, Werner Hügel, Hans-Wilhelm Höpp, and Harald Schicha

Soft-Tipped Coronary Artery Catheters Reduce the

Frequency of Coronary Artery Dissection
Paul Van Tassel, Irvin F. Goldenberg, Wes Pedersen, Kristin Madison, Constance Madison, David Streitz, Michael Walker, Susanne K. Roeller, S. Murthy Tadavarthy, Philip D. Murray, James E. Finstad, Timothy J. Koelz, Mark Samii, James D. Madison, Marc R. Pritzker, Fredarick L. Gobel, and Robert A. Van Tassel

Magnesium Sulfate Therapy for Sustained Monomorphic Ventricular Tachycardia Byron J. Allen, Michael A. Brodsky, Edmund V. Capparelli,

Cathy R. Luckett, and Lloyd T. Iseri

Morning Increase in the Time of Onset of Sustained Ventricular Tachycardia

Nicholas Twidale, Susan Taylor, William F. Heddle, Bronte F. Ayres, and Andrew M. Tonkin

Ultrasonic Debridement of the Aortic Valve with Six-Month Echocardiographic Follow-Up Walter J. Scott, Alexander L. Neumann, and Robert B. Karp

Hypertrophic Cardiomyopathy as a Cause of Massive Cardiomegaly (>1,000 g)

Charles Stewart Roberts and William C. Roberts

Hemodynamic Changes During Sickle Cell Crisis Mervyn Singer, Seda Boghossian, David H. Bevan, and E. David Bennett

Fidelity of Micromanometer Pressure Transduction in Closed-End Angiographic Catheters

Thomas R. Lloyd and Richard L. Donnerstein

CASE REPORTS

ST-Segment Changes During Transmural Myocardial Ischemia in Chronic Left Bundle Branch Block Adam Cannon, S. Ben Freedman, Brian P. Bailey, and Louis Bernstein

1217

Surgical Correction of Idiopathic Paroxysmal Ventricular Tachycardia Possibly Related to Left Ventricular False Tendon

Michihiro Suwa, Yutaka Yoneda, Hikaru Nagao, Yasuhiko Sakai, Yasushi Nakayama, Yuzo Hirota, Keishiro Kawamura, and Takashi Iwa

INSTRUCTIONS TO AUTHORS on page 1130

DECEMBER 1, 1989, VOL. 64, NO. 19

CORONARY ARTERY DISEASE

Early and Late Results of Coronary Angioplasty Without Antecedent Thrombolytic Therapy for Acute **Myocardial Infarction**

James H. O'Keefe, Jr., Barry D. Rutherford, David R. McConahay, Robert W. Ligon, Warren L. Johnson, Jr., Lee V. Giorgi, James E. Crockett, Ben D. McCallister, Robert D. Conn, George M. Gura, Jr., Thomas H. Good, David M. Steinhaus, Timothy M. Bateman, Thomas M. Shimshak, and Geoffrey O. Hartzler

1231

Correlation of Baseline Plasminogen Activator Inhibitor Activity with Patency of the Infarct Artery After Thrombolytic Therapy in Acute Myocardial Infarction Gabriel I. Barbash, Hanoch Hod, Arie Roth, Hilton I. Miller, Shemuel Rath, Yedahel Har Zahav, Michaela Modan, Ariela Zivelin, Shlomo Laniado, and Uri Seligsohn

Cardiac Event Rate After Non-Q-Wave Acute Myocardial Infarction and the Significance of its **Anterior Location**

Walter Kao, Fareed Khaja, Sidney Goldstein, and Mihai Gheorghiade

Prognostic Utility of Predischarge Dipyridamole-Thallium Imaging Compared to Predischarge Submaximal Exercise Electrocardiography and Maximal Exercise Thallium Imaging After Uncomplicated Acute Myocardial Infarction Lawrence W. Gimple, Adolph M. Hutter, Jr., Timothy E. Guiney, and Charles A. Boucher

Usefulness of Sustained-Release Diltiazern for Stable **Angina Pectoris**

W. Peter Klinke, Martin Juneau, Michael Grace, William J. Kostuk, Peter Pflugfelder, Claude R. Maranda, Wayne Warnica, Christine Chin, Lawrence Annable, Ellen E. Dempsey, and David Waters

1253

Initial Angiographic Results in Ablation of Atherosclerotic Plaque by Percutaneous Coronary Excimer Laser Angioplasty Without Subsequent **Balloon Dilatation**

Karl R. Karsch, Karl K. Haase, Manfred Mauser, and Wolfram Voelker

Percutaneous Cardiopulmonary Bypass Support in High-Risk Patients Undergoing Percutaneous Transluminal Cororary Angioplasty

Fayaz A. Shawl, Michael J. Domanski, Sudhakar Punja, and Tomas J. Hernandez

Predictors of Success in Percutaneous Transluminal Coronary Angioplasty of Chronic Total Occlusions Paul J. LaVeau, Michael S. Remetz, Henry S. Cabin, John F. Hennecken, Susan H. McConnell, Robin E. Rosen, and Michael W. Cleman

1270

Early Hospital Discharge After Percutaneous

Transluminal Coronary Angioplasty
David R. Cragg, Harold Z. Friedman, Steven L. Almany, Vellappillil Gangadharan, Renato G. Ramos, Arlene B. Levine, Timothy A. LeBeau, and William W. O'Neill

Predictive Value of Quantitative Dipyridamole-Thallium Scintigraphy in Assessing Cardiovascular Risk After Vascular Surgery in Diabetes Mellitus

Steven E. Lane, Stanley M. Lewis, John J. Pippin, Edward J. Kosinski, David Campbell, Richard W. Nesto, and Thomas Hill

Clinical Correlates and Prognostic Significance of Type A Behavior and Silent Myocardial Ischemia on the Treadmill

William C. Siegel, Daniel B. Mark, Mark A. Hlatky, Frank E. Harrell, Jr., David B. Pryor, John C. Barefoot, and Redford B. Williams, Jr.

Prognosis in Patients with a Strongly Positive Exercise Electrocardiogram

Peter Bogaty, Gilles R. Dagenais, Bernard Cantin, Pierre Alain, and Jacques R. Rouleau

ARRHYTHMIAS AND CONDUCTION DISTURBANCES

Natural History of Potentially Lethal Ventricular Arrhythmias in Patients Treated with Long-Term Antiarshylamic Drug Therapy

Harold L. Kennedy, Michael K. Sprague, Sharon M. Homan, Sondra M. Seiler, Robert D. Wiens, Denise L. Janosik, Robert M. Redd, and Thomas A. Buckingham with the technical assistance of Debra Lyyski and Julie Stoltz

Argon Laser Ablation of Malignant Ventricular Tachycardia Associated with Coronary Artery Diseas Sanjeev Saksena, Isaac Gielchinsky, and Nicholas G. Tullo

Efficacy of Intravenous Propranolol for Suppression of Inducibility of Ventricular Tachyarrhythmias with Different Electrophysiologic Characteristics in Coronary Artery Disease

Heikki V. Huikuri, Marilyn Cox, Alberto Interian, Jr., Kenneth M. Kessler, Frances Glicksman, Agustin Castellanos, and Robert J. Myerburg

Comparison of Adenosine and Verapamil for Termination of Paroxysmal Junctional Tachycardia Clifford Garratt, Nicholas Linker, Michael Griffith, David Ward, and A. John Camm

CONTENTS INDEX

1317

Efficacy and Safety of Flecainide Acetate in the Maintenance of Sinus Rhythm After Electrical Cardioversion of Chronic Atrial Fibrillation or Atrial Flutter

Isabelle C. Van Gelder, Harry J.G.M. Crijns, Wiek H. Van Gilst, Leendert M. Van Wijk, Hans P.M. Hamer, and Kong I. Lie

1322

Usefulness of Serial Pulmonary Function Testing as an Indicator of Amiodarone Toxicity

Jill A. Ohar, Farris Jackson, Jr., Robert M. Redd, Gregory R. Evans, and Carlos W. Bedrossian

1327

Operative Therapy of Atrioventricular Reentry and Results of an Anatomically Guided Procedure Osamu Fujimura, Gerard M. Guiraudon, Raymond Yee, Ariun D. Sharma, and George J. Klein

SYSTEMIC HYPERTENSION

1333

Univariate Genetic Analysis of Blood Pressure in Children (The Medical College of Virginia Twin Study) Richard M. Schieken, Lindon J. Eaves, John K. Hewitt, Michael Mosteller, Joann N. Bodurtha, William B. Moskowitz, and Walter E. Nance

CONGESTIVE HEART FAILURE

1339

Ability of Left Ventricular Stress-Shortening Relations, End-Systolic Stress/Volume Ratio and Indirect Indexes to Detect Severe Contractile Failure in Ischemic or Idiopathic Dilated Cardiomyopathy

Mary J. Roman, Richard B. Devereux, and Robert J. Cody

1941

Long-Term Predictors of Sudden and Low Output Death in Chronic Congestive Heart Failure Secondary to Coronary Artery Disease

Howard A. Rockman, Carl Juneau, Kanu Chatterjee, and Jean-Lucien Rouleau

VALVULAR HEART DISEASE

1349

Quantitation and Significance of Systolic Mitral Leaflet Displacement in Mitral Valve Prolapse Anthony J. Sanfilippo, Hoshiar Abdollah, and

Gary W. Burggraf

CONGENITAL HEART DISEASE

1356

Intermediate-Term Follow-Up Results of Balloon Aortic Valvuloplasty in Infants and Children with Special Reference to Causes of Restenosis

P. Syamasundar Rao, Mohinder K. Thapar, Allen D. Wilson, Jay M. Levy, and Paramjeet S. Chopra

MISCELLANEOUS

1361

Effect of Exercise and Cavity Size on Right Ventricular Function in Morbid Obesity

Martin A. Alpert, Amolak Singh, Boyd E. Terry, Diana L. Kelly, M.S. Sharaf El-Deane, Vaskar Mukerji, Daniel Villarreal, and Andre K. Artis

METHODS

1366

Prospective Doppler Echocardiographic Evaluation of Pulmonary Artery Diastolic Pressure in the Medical Intensive Care Unit

Richard T. Lee, Christopher P. Lord, Ted Plappert, and Martin St. John Sutton

EDITORIAL

1371

Generic Substitution of Antiarrhythmic Drugs Paul E. Nolan, Jr.

BRIEF REPORTS

1374

Frequency of Symptoms Suggestive of Dynamic Coronary Artery Disease in Patients Referred for Coronary Angiography

Richard W. Nesto, Stuart W. Zarich, Glen J. Kowalchuk, Aaron E. Kenigsberg, Scott W. Shurmur, and Lawrence S. McAuliffe

1376

Influence of Cardiac Pacing Mode on the Long-Term Development of Atrial Fibrillation

Joshua M. Feuer, Adrian H. Shandling, and John C. Messenger, with the technical assistance of Craig D. Castellanet and Lavergne A. Thomas

1379

Effects of Low Altitude Exposure on 24-Hour Blood Pressure and Adrenergic Activity

Paolo Palatini, Roberto Businaro, Giuseppe Berton, Paolo Mormino, GianPaolo Rossi, Antonietta Racioppa, Achille Cesare Pessina, and Cesare Dal Palù

1382

Attenuation of the Pressor Response to Intravenous Furosemide by Angiotensin Converting Enzyme Inhibition in Congestive Heart Failure

Steven R. Goldsmith, Gary Francis, and Jay N. Cohn

1385

Comparison of Results of Percutaneous Balloon Mitral Valvotomy Using Consecutive Single (25 mm) and Double (25 mm and 12 mm) Balloon Techniques Saad Al Kasab, Paulo A. Ribeiro, and William Sawyer

1387

Color Flow Doppler Evaluation of St. Jude Medical Prosthetic Valves

Mohsin Alam, Howard S. Rosman, Darleen McBroom, Lois Graham, Donald J. Magilligan, Jr., Fareed Khaja, and Paul D. Stein

Color Flow Doppler Evaluation of Cardiac Bioprosthetic Valves

Mohsin Alam, Howard S. Rosman, Kathryn Hautamaki, Lois Graham, Donald J. Magilligan, Jr., Fareed Khaja, and Paul D. Stein

1392

Analysis of Calcium, Zinc, Magnesium, Iron and Copper Content in Myocardium and Stenotic Mitral Valves

Ilker Durak, Ahmet Şahin, Zuhal Yurtarslani, and **Ahmet Sonel**

1394

Mechanism of Disappearance of S₃ with Maturation Marlene K. Wilken, David G. Meyers, Peter A. Laski, Frank P. Yi, and Helen Starke

1396

Severe Pulmonary Hypertension and Cor Pulmonale in the Acquired Immunodeficiency Syndrome

Ronald B. Himelman, Mary Dohrmann, Phil Goodman, Nelson B. Schiller, Niel F. Starksen, Martha Warnock, and Melvin D. Cheitlin

1399

In Vivo Relation Between Cineangiographic Jet Width and Jet Width Imaged by Color-Coded Doppler

Scott E. Klewer, Thomas R. Lloyd, and Stanley J. Goldberg

CASE REPORTS

1402

Diagnostic Role of Intraoperative Epicardial Echocardiography Following Complications of Mitral Valve Replacement with the Bjork-Shiley Prosthetic Valve

Minoru Tanaka, Eiji Takeuchi, Mitsuo Kawamura, and Toshio Abe

Mitral Valve Replacement for Mitral Lipoma Associated with Severe Obesity Allen L. Dollar, William C. Roberts, Kenneth M. Kent,

Michael W. Burkhart, and Robert B. Wallace

FROM THE EDITOR

Living with a Congenitally Biscuspid Aortic Valve William C. Roberts

INSTRUCTIONS TO AUTHORS on page 1410 VOLUME INDEXES on page 1411

DECEMBER 5, 1989, VOL. 64, NO. 20 A Symposium: New Trends in the Treatment of Rhythm Disorders